COMPUMAX

MICROREC

- POWERFUL ACCOUNTING PACKAGE FOR SMALL BUSINESS
- COMPUTER EXPERTISE *NOT* REQUIRED
- SOURCE CODE PROVIDED
- INTERACTIVE WITH OTHER COMPUMAX PROGRAMS

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ATARI

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INTRODUCTION

Features

AGED TRIAL BALANCE OF ACCOUNTS RECEIVABLE

The program will group and list for you all accounts receivable outstanding under 30 days after invoicing, between 31 and 60 days after invoicing, between 61 and 90 days, and over 90 days. This breakdown can assist you in projecting income, establishing collection priorities and spotting "problem" accounts.

LISTING OF ACCOUNTS RECEIVABLE BY INVOICE NUMBER

You may call up accounts from the Master File by single invoice number or within a range of invoice numbers.

LISTING OF ACCOUNTS RECEIVABLE BY CUSTOMER

You may request records from the Master File for any specific customer or group of customers.

LISTING OF ACCOUNTS RECEIVABLE BY DATE

The program allows you to display or print all accounts receivable invoiced on a specific date or between any two dates.

********** SPECIAL LISTING FEATURE **********

You may use any combination of the above three parameters (listing by Customer, Invoice Number or Date) to specify the group of records you want to list. For example, you

may list only invoices #2066 through 2089/A issued between May 10th and May 21st for Customer #4.

INVOICES

You may print these for specific customers or for all customers with open invoice records in the Transaction File. Invoices handle one line item, shipping, sales tax and total amount, as well as debiting and crediting these charges to the general ledger accounts you specify.

CUSTOMER STATEMENTS

These may be printed for all customers in the Master File or for certain specified customers. Statements include information on charges, payments and debit or credit balance forward.

DRY RUN POSTING

Before posting your transactions (new invoices and new payments) to your Master File, you may do a "dry run" posting, carrying out the motions of posting without actually writing data into the Master File. The program alerts you with error messages if you are inadvertently attempting to "double post". If you do not receive error messages you may go ahead and do the actual posting.

CUSTOMER FILE

A separate Customer File holds vital information for each of your customers. You may enter the customer information directly into this file or indirectly, via the Transaction File when you enter an invoice for a new customer. You will establish general ledger account numbers here to which you want to debit and credit the accounts receivable transaction amounts for each customer (although you may always override these pre-established numbers at the time of entering data for a new invoice). You may list all or partial information from your Customer File by customer number or alphabetically by customer name.

SPECIAL FILE EDITING FEATURE

To change or delete information you may call up the record by either the invoice number or customer number. Once you find any record you may go forward to the next record or backwards to the last record by simply hitting the "F" or "B" keys. Once there you may change or delete the desired records.

MICROREC

Accounts Receivable Software
for
ATARI 800

USER MANUAL

The COMPUMAX business application programs are computer programs that keep records and compute transactions for business or personal use. They are designed for people who have minimal familiarity with computers and only a basic knowledge of accounting rules. This is possible because the programs themselves are self-explanatory, telling you exactly what they need at every step. After you have become aquainted with MICROREC, you might want to save even more time and frustration with:

MICROLEDGER
MICROPAY
MICROINV
MICROPERS
ORDER ENTRY

These packages are described briefly on page 25 of the manual.

LIMITATION OF LIABILITIES AND DISCLAIMER OF WARRANTIES

COMPUMAX ASSOCIATES, INC. has dedicated great care in designing, developing, coding and publishing its programs. It however, makes no express or implied warranties of any kind with regard to performance or fitness of purpose for any product. In no event shall COMPUMAX ASSOCIATES, INC. be liable for incidental or consequential damages in connection with or arising out of the distribution or use of its products.

ACCOUNTS RECEIVABLE IN A NUTSHELL

Put simply, the A/R function in business accounting is to record dollar amounts, sources and due dates of all monies owed to you for services rendered. On the surface it all seems like a simple enough task, but complications do arise. For example: Will there be sufficient funds in the bank for Friday's payroll? What is the current dollar amount of accounts outstanding over 90 days? Which customers have outstanding balances due over $4,000.00?

With bookkeeping systems of the past, ferreting out this type of information involved a lot of time-consuming, error-filled sorting and re-sorting of necessary data. With MICROREC and your ATARI 800 Personal Computer you will be able to locate this information — accurately sorted, listed and totalled — at a moment's notice.

MICROREC IN A NUTSHELL

MICROREC is a series of six computer programs that carry out the accounts receivable functions for a small business. You will be manipulating three files: a Master File, which contains all of the to-date information concerning your accounts receivable system; a Transaction File, which you will create to cover specific periods of your own choosing, and into which you will enter the data reflecting your A/R current activity, i.e., new invoices and payments against old invoices. When you are satisfied that the Transaction File data are complete and accurate you may POST to the Master File. The third file is the Customer File, which contains a list of active customers and their vital statistics. MICROREC will print invoices using your Transaction File data, and print Customer Statements using data from the Master File. You may obtain aging reports, reports of A/R by customer, date or invoice number, and totals of your cash projections.

MICROREC is designed to run on a 32K ATARI 800 Personal Computer using 2 disk drives. Record capacities are limited only by the space on the data disk. You may handle up to 50 transactions per period (before you post to the Master File), 300 open invoices in the Master File and 200 active customers in the Customer File. You may use additional disk drives if you find that your business requires additional record capacity.

THE SOFTWARE PACKAGE

You probably know what you want from an accounts receivable package or you wouldn't be bothering with A/R software. Different

businesses, however, have different needs from an A/R package. Compumax has endeavered to provide the A/R functions essential to small businesses along with some additional features which should prove useful to many of you. We could not supply exactly the combination of features desired by everyone, but we believe that this compact program will handle the A/R needs of most small businesses without modification. And for those of you who want to make modifications, and choose to change the programs rather than your accounting procedures, Compumax has provided the source code, record structures and some guidelines to tailoring the software and invites those of you versed in Atari Basic to customize this package yourselves.

For Users of the Compumax MICROLEDGER Package:

MICROREC offers and additional bonus to those of you who also use the Compumax MICROLEDGER system. MICROREC creates Journal File records identical in format to the Journal File records used by MICROLEDGER. You can then post this Journal File to your Chart of Accounts. In a similar fashion, the other Compumax packages (MICROPAY, MICROINV and MICROPERS) can communicate with MICROLEDGER. The MICROLEDGER-MICROPAY-MICROREC-MICROINV-MICROPERS combination provides the user with a very effective and powerful software package.

For Users of the Compumax ORDER ENTRY Package:

If you are also a user of the ORDER ENTRY package, you may use ORDER ENTRY to automatically transfer all relevant information from ORDER ENTRY to MICROREC. ORDER ENTRY is interactive with MICROPAY and MICROINV as well. A full set of Compumax packages can greatly enhance your accounting capabilities.

USING THE PROGRAMS

Although this program was designed to be used easily by a novice computer user, you, the user, must contribute a certain amount of effort in familiarizing yourself with both your hardware and your software. READ YOUR USER MANUALS THOROUGHLY.

After you are comfortable with your ATARI 800 machine, take some time to read through your MICROREC user manual. Read the short "Beginner's Guide" and then read once through the text of the manual. Look at the sample run at the back of the manual. Now turn on the computer, load the program and experiment with the sample data provided on the disk. Practice adding and deleting records, listing files, printing invoices and statements, and posting to the Master File. When you are comfortable with the procedures, you are ready to re-initialize your files and follow the step by step instructions to enter your own data.

BEGINNER'S GUIDE

MICROREC

BEGINNER'S GUIDE TO RUNNING THE PROGRAMS

Every computer user falls into this category at some time. Even if you are experienced with the ATARI 800 and application software, it's a good idea to read this over and get acquainted with your system.

SYSTEM REQUIREMENTS

To run MICROREC you will need:

- 1 ATARI 800 Personal Computer with at least 32K of RAM (Random Access Memory) and ATARI BASIC. The RAM paks come in cartridges that fit into slots in the computer. You can buy these at your retail computer store. The BASIC cartridge, when plugged into the slot, allows you to run programs such as MICROREC written in ATARI BASIC.

- 1 video screen — a viewing monitor, color or black and white. You may simply hook up a television screen if you wish. This is where your program prompts, data entry and reports will be displayed.

- 2 ATARI disk drives. MICROREC comes on a 5¼" program disk which you load via drive #1, and includes a data disk containing sample data which is used in drive #2.

* 1 ATARI printer. This is not an absolute requirement, but is certainly useful if you want to keep printouts of your files and reports.

LOADING THE PROGRAMS

MICROREC has an "auto-boot" feature, which means that you do not have to issue any commands to load the programs. Simply turn on the drives and viewing monitor, insert the MICROREC program disk into drive 1 and the data disk into drive 2, and flip the switch on the main unit; in a few seconds you will see the MICROREC program selection menu displayed on the screen. If you wish to load the programs manually, simply key in:

RUN"D:MICROREC (and depress the RETURN key)

DISK OPERATING SYSTEM (DOS)

The DOS is a set of system programs which allow you to perform certain essential functions such as copying disks and files, loading programs into memory, saving them on disks or tapes, etc. The DOS is contained on your MICROREC program disk and

is automatically loaded when you load MICROREC. Run MICROREC only with this particular version of the DOS, since it is possible that future versions of ATARI DOS may contain some features incompatible with this version of MICROREC.

DIRECTORY

To get a listing of the programs contained on this (or any) disk, follow this procedure:

1. Load MICROREC and choose Option 0 (to quit)
2. Type DOS, then hit the RETURN key. The screen will now display your DOS programs.
3. Select Option A for disk directory. Then hit the RETURN key in response to the next prompt. The disk directory will now appear on the screen.

BACK UP YOUR DISK

Before you do anything it is extremely wise to make a copy of the program disk in case anything happens to "blow up" the programs. This unfortunate event could be caused by exposing the disk to heat, to magnetic erasure, or by power surge or failure while running the program. We recommend that you make a new copy at least once a month, to insure yourself against normal disk wear.

Before making a copy of any diskette, place either a write-protect tab or small piece of masking tape over the small indentation on the right hand side of the original disk to insure that nothing will be inadvertently written onto the master disk.

Load your DOS and select Option I to format the blank disk. Insert the blank disk in one of the drives and type in the drive number when asked which drive to format. After your disk is formatted, select Option J from the DOS. You will be asked to enter the number of your source and destination drives. Then follow the instructions in the copy program, and you will have make a new MICROREC program disk. Follow this same procedure to make copies of your data disks when you need to back up your data files.

Be sure to keep write-protect tabs on your program disk at all times. Read your ATARI manual about procedures for keeping the read/write heads of your disk drives clean for longer disk wear.

KEYBOARD

This is pretty similar to a typewriter keyboard. You will use it to respond to questions asked by the program and displayed on the screen. Remember that the number "one" is not the same as the lower case "L" and that "zero" is not the letter "o". You will

hit the RETURN key when you finish entering information for each computer prompt. If you spot a mistake before you have hit the RETURN key, use the delete or insert key to fix it. If you have already hit the RETURN key you must use the change or delete routine in the MICROREC program to correct it.

ERROR MESSAGES

You will get these occasionally. We have done everything possible to guard you against being thrown out of the program due to incorrect data input, but you may receive error messages due to incorrect procedures, operating system problems or disk damage. If this happens, look up the error code (see your ATARI manual) to try to determine what the problem is. To deliberately leave the program, use the BREAK key. Type RUN or CONT to bring back your program.

MEMORY

When you load programs you are actually bringing the program from "long term" storage on the disk and putting it into the "short term" memory of the computer itself. Only one of the six programs can be retained in memory at any one time. Your program and data will remain in the RAM memory of the computer until you load a different program by selecting a different number from the main Program Selection Menu or turn off the power, but they will remain on the disk until you delete them using a program or DOS command or until you write over them. When you enter data by way of the keyboard, the data goes into RAM and then is automatically stored on the data disk.

USING ADDITIONAL DATA DISKS

If you have filled up the available space on your MICROREC disk (you will receive a message on the screen to this effect when this occurs) or if you just want to keep some of your data on a separate disk, you will need to know how to use extra data disks.

You must FORMAT new disks before you can store data on them. Load the DOS on the MICROREC program disk (see "DIRECTORY" section for procedures) and insert a blank disk. Then select Option "I" from the DOS menu and follow the instructions to do the formatting.

BE SURE TO LABEL ALL DISKS SO THAT YOU KNOW WHAT FILES AND DATES THEY REFER TO.

THE INTERACTIVE JOURNAL FILE

MICROREC, MICROPAY, MICROINV and MICROPERS are interactive with the General Ledger package, MICROLEDGER, through the Journal File.

Each of the packages generate a Journal File which can then be posted to MICROLEDGER's Chart of Accounts File. If you wish to list any of the subsidiary Journal Files (those created by MICRO-PAY, MICROREC, MICROINV and MICROPERS), simply insert the dual drive MICROLEDGER program disk and type the name of the subsidiary Journal File you wish to list (PAY, REC, INV or PERS). Then you may list, edit or post your subsidiary Journal File using Options in the MICROLEDGER program to do this.

DELETING FILES

If for any reason you wish to delete a file you may use option D in the ATARI DOS (contained on the Program disk) to do this. Load the DOS, select option D, and when you are prompted with
DELETE FILE SPEC?
type D2:filename
where you type the name of the file you wish to delete in the "filename" slot.
To delete the Journal File in MICROREC, type
D2:J*.*
You will then be prompted with: D2:JOUREC.DAT?
Answer "Y".
The next prompt is : D2:JOUREC.NDX?
Again answer "Y".
Now both your files have been deleted.

The above description applies to files located on the disk in drive 2.

PROGRAMS

Program Selection Menu

1 — Add to/List/Edit the A/R Transaction File and/or Print Invoices

2 — List/Edit the A/R Master File and/or Print Customer Statements

3 — Add to/List/Edit the A/R Customer File

4 — Print Aged Receivables

5 — Post Transactions

6 — Initialize A/R Files and/or Perform Periodic Purging of Master File

MICROREC

MICROREC 1 — Add to/List/Edit the A/R Transaction File and/or Print Invoices

This program contains all of the operations performed on the Transaction File except for the Posting, which is handled in Program 5. When you select Program 1, a sub-menu will be displayed on the screen:

11 — Add new invoices and/or payments against existing invoices

12 — Edit records in Transaction File

13 — List Transaction File

14 — Print Invoices

0 — Quit

Option: 11 — Add new invoices and/or payments against against existing invoices

After the Transaction File has been initialized (using Program 6) you will use this option to enter your Transaction data. This file is set up to handle 50 records, so establish your transaction period accordingly. After you select Option 11 you may do one of three things:

— add an invoice for a NEW customer by just hitting the RETURN key. You will now be asked for the relevant information to create the invoice and A/R record. The information on the new customer will also be added to the Customer File.

— add an invoice or payment against an existing invoice for an OLD customer by entering the customer number. The computer will retrieve the customer's name and address for you and ask you to enter the relevant information. If you don't know the customer number, you may enter a question mark (?). Then you will be asked for the customer's name. You may enter the complete name or just the first part of it and the computer will search through its file for this customer. For example, if you only remember that the name begins with "B", just enter "B" and the computer will display customers whose names begin with "B" until you locate the one you want. When the customer has been located you will be asked to input the relevant invoice information. If you have several invoices and/or payments to enter for one customer, take careful note of the customer number assigned by the computer so that you may enter it when you enter data for the next record. If the customer already exists in your customer file, be sure to always add records for an OLD customer; otherwise you will create multiple customer records for the same customer. PLEASE NOTE: You may enter a maximum of FOUR PAYMENTS against any one invoice.

– enter an "E" to exit from the program and return to the Program 1 menu.

*** INFORMATION REQUIRED WHEN ADDING A NEW CUSTOMER:

NAME.....You may use a maximum of 25 characters.
ADDRESS (Line 1).....Maximum of 25 characters.
ADDRESS (Line 2).....Maximum of 15 characters. If you do not need to use this, just hit the RETURN key.
CITY.....Maximum of 15 characters.
STATE ABBREVIATION...Maximum of 2 characters
AREA CODE OF PHONE NUMBERS.....Hit the RETURN key if you don't use this.
PHONE NUMBER.....Maximum of 7 numbers. Hit RETURN if you don't use this.

*DEFAULT DR LEDGER ACCT.....Enter a three-digit account number here. This is the account in your general ledger to which all TOTAL INVOICE AMOUNTS for this customer will be debited on subsequent invoices. If you wish to debit to a different account on any invoice you may override this DEFAULT number at that time. If you do not enter a default number here, the program will supply one for you (110).

*DEFAULT CR LEDGER ACCT.....Just as for the DR number, enter a three-digit account number here. This is the general ledger account number to which the ITEM AMOUNTS will be credited for this customer on subsequent invoices. If you wish to credit to a different account on any invoice you may enter another number at that time to override this default number. If you do not enter a default number here the program will supply one for you (710).

REMARKS.....Maximum of 16 characters.

After you enter this information you will be asked if this is a NEW INVOICE (Y or N)? If you answer "Y" you will be asked for the invoice information. If you answer "N" the program assumes you wish to enter a payment and asks for payment information.

*NOTE: If you do not use MICROLEDGER and do not need the CR and DR numbers, just enter 0 here.

*** INFORMATION REQUIRED WHEN ADDING A NEW INVOICE:

INVOICE NUMBER.....	Maximum of 8 characters. You may use numbers or other symbols.
CUSTOMER P.O.#.....	Maximum of 8 characters, numbers or other symbols.
INVOICE DATE.....	In the form MMDDYY, where M=month, D=day, Y=year.
ITEM DESCRIPTION.....	Maximum of 20 characters.
ITEM AMOUNT.....	Numbers and decimals only.
CR ACCT #.....	Enter the three-digit account number from the general ledger to which you want to credit the sale. If you enter a period (.) here the DEFAULT CR NUMBER will be used (you will see this number displayed in parentheses here).
SALES TAX AMOUNT.....	Numbers and decimals only. Enter zero (0) if there is none.
CR ACCT #.....	Enter the account number to which you want to credit Sales Tax. If you enter a period (.) here, the program will supply its own default number (330).
SHIPPING AMOUNT.....	Numbers and decimals only. Enter zero (0) if there is none.
CR ACCT #.....	Enter the account number to which you want to credit shipping. If you enter a period (.) here, the program will supply its own default number (320).
TOTAL INVOICE AMOUNT.....	Numbers and decimals only.
DR ACCT #.....	Enter the account number to which you want to debit the account receivable. If you enter a period (.) here, the default DR number which you established for this customer will be used (you will see this number displayed here in parentheses).
TERMS.....	Maximum of 16 characters.

*** INFORMATION REQUIRED WHEN ADDING A PAYMENT TO AN EXISTING INVOICE -- maximum of 4 payments may be applied to any one invoice.

INVOICE NUMBER.....	8 character maximum. Enter the number of the existing invoice.
CUSTOMER P.O. #.....	Enter your customer's Purchase Order Number, or hit RETURN if there is none.
PAYMENT DATE.....	Enter this in the form MMDDYY.
REMARKS.....	Simply hit RETURN if there are none.
PAYMENT AMOUNT.....	Numbers and decimals only.
DR ACCT #.....	Enter the three-digit account number to which you want to debit the payment. If you enter a period (.) the program will assign the default account number 110.

CR ACCT #..... Enter the three-digit account number to which you want to credit the payment. If you enter a period (.) the program will assign the default CR number displayed in parentheses. (This is the DR number you established for this record when adding a new invoice, and now that you have received a payment you are crediting that same account.)

Option: 12 — Edit Records in Transaction File

Use this option to make corrections, changes or deletions for records in your Transaction File. You must enter either the invoice number or the customer number so that the computer can find the record for you.

The computer will first ask: "Do you know the invoice number (Y or N)?"

Enter "Y" if you know the number, "N" if you don't. If you answer "Y" you will be asked to key in the invoice number. You may enter the entire number or just the initial part. For example, if you enter "3" the computer will retrieve all invoice numbers beginning with "3" and display the records until you find the one you want.

If you answered "N", you will now be asked to enter the customer number.

When the record has been located, the customer number and invoice number will be displayed and you will be asked if this is the right record. If there is more than one record with these same numbers (i.e., payments on an original invoice), the invoice number and customer number may be displayed more than once. When you answer "Y" to the question "Is this the right record?" the entire record will be displayed for you.

If this turns out to be a record other than the one you wanted you may hit the "F" key to go forward in the file or the "B" key to go backwards. You may also use these keys to locate other records you wish to edit after you finish with this one.

Hit the "D" key if you wish to delete the record entirely. Hit the "C" key if you want to make changes to any of the information. Each item in the record will be displayed individually now, and you may either enter new information or hit the RETURN key to keep it unchanged.

After you DELETE or CHANGE records you must exit properly by (1) entering "E", (2) answering "N" to the question "Do you know the invoice number?" and (3) entering 0 (zero) for the customer number. If you attempt to exit in any other way (such as hitting the BREAK key) the change or deletion will not be effective.

Option: 13 — List Transaction File

Use this option to list on the screen or printer all of the records in your Transaction File. If you wish to return to the Program 1 menu before the entire file has been listed, hit the BREAK key and then type RUN.

Option: 14 — Print Invoices

- You may print invoices for ALL RECORDS in the Transaction File by just hitting RETURN.

- You may print invoices for A SINGLE CUSTOMER in the Transaction File by entering the customer number.

You may print these on the printer or simply display them on the screen. Type "END" to return to the Program 1 menu.

Option: 0 — Exit

Select this option to return to the main Program Selection Menu.

FOR USERS OF MICROLEDGER: A note on DR and CR Account Numbers

If you wish to use the DEFAULT debit and credit account numbers created by the program, set up your MICROLEDGER Chart of Accounts to contain the following accounts:

110 - Cash in Bank
130 - Accounts Receivable

710 - Direct Sales

320 - Shipping Payable
330 - Sales Tax Payable

If you DEBIT account numbers 101-299 and 801-999, the program will generate a positive value for these amounts in MICROLEDGER.

If you DEBIT account numbers 301-799 the program generates a negative value for the amounts.

If you CREDIT account numbers 101-299 and 801-999, the program will generate a negative value for these amounts in MICROLEDGER.

If you CREDIT account numbers 301-799 the program generates a positive value for the amounts.

If you wish to change the DEFAULT account numbers created by the program, see the section on CUSTOMIZING for guidelines.

MICROREC 2 — List/Edit the A/R Master File and/or Print Customer Statements

21 — Edit records in Master File

22 — List Master File

23 — Print Statements

0 — Exit

Option: 21 — Edit Records in Master File

You may call up a record to be edited by either the invoice number or the customer number.

The computer will ask: "Do you know the invoice number (Y or N)?"

Enter "Y" if you know the number, "N" if you don't. If you answer "Y" you will be asked to key in the invoice number. You may enter the entire number or just the initial part. For example, if you enter "3" the computer will retrieve all invoice numbers beginning with "3" and display the records until you find the one you want.

If you answered "N" you will now be asked to enter the customer number.

When the record has been located, the customer number and invoice number will be displayed and you will be asked if this is the right record. If there is more than one record with these same numbers (i.e., payments on an original invoice), the invoice number and customer number may be displayed more than once. When you answer "Y" to the question "Is this the right record?" the entire record will be displayed for you.

If this turns out to be a record other than the one you wanted you may hit the "F" key to go forward in the file or the "B" key to go backwards. You may also use these keys to locate other records you wish to edit after you finish with this one.

Hit the "D" key if you wish to delete the record entirely. Hit the "C" key if you want to make changes to any of the information. Each item in the record will be displayed individually now, and you may either enter new information or hit the RETURN key to keep it unchanged.

After you DELETE or CHANGE records you must exit properly by (1) entering "E", (2) answering "N" to the question "Do you know the invoice number?" and (3) entering 0 (zero) for the customer number. If you attempt to exit in any other way the change or deletion will not be effective.

Option: 22 — List Microrec Master Receivables File

You will be asked three questions here:

1 — Do you wish to list only a group of one or more customers (Y or N)?

2 — Do you wish to list only a group of one or more invoices (Y or N)?

3 — Do you wish to list only a group of invoices entered between two given dates (Y or N)?

You may specify more narrowly which records you wish to list by answering "Y" to one or more of the questions. If you answer "Y" to question 1 you may limit the listing to certain customers by entering the lowest and highest customer numbers you wish to list. If you want to list only 1 customer, enter that number as both lowest and highest.

If you answer "Y" to question 2 you may limit the listing to certain invoice numbers. You will be asked to enter the lowest and highest invoice numbers. If you want to list just one invoice, enter that number as both lowest and highest.

If you answer "Y" to question 3 you may limit the listing to invoices issued between certain dates by entering the earliest and latest dates. If you want to list invoices issued on just one date, enter that date (in the form MMDDYY) as both earliest and latest.

You may list these records on the printer or simply on the screen.

Option: 23 — Print Customer Statements

You will be asked: "Do you wish to print statements for only a group of one or more customers (Y or N)?"

If you answer "Y" you will be asked for the lowest and highest customer numbers. To print a statement for just one customer, enter that number as both lowest and highest.

You may display statements on the screen or produce them in hard copy with your printer.

Option: 0 — Exit

Choose this option to return to the main program selection menu.

MICROREC 3 — Add to/List/Edit the A/R Customer File

31 — Examine/Edit Customer File

32 — List Customer File by Number

33 — List Customer File by Name

0 — Exit

Option: 31 — Examine/Edit Customer File

You may use this option to add new customers to the Customer File or to edit existing customer records. Keep in mind that you do not have to enter new customers through Program 3 — you may also do this through Program 1, Option 11 when you are adding an invoice for a new customer. Be sure that each of your customers appears only ONCE in your Customer File; otherwise you will not receive accurate customer information.

HIT RETURN to simply add a new customer. The computer will assign a customer number to this customer. If you want to assign a number of your own choosing (which is not currently in use) type in that number, and the program will ask you for the relevant information to establish a new customer in the file (see INFORMATION REQUIRED WHEN ADDING A NEW CUSTOMER in the description of Option 11). If the number you entered is in use the computer will display that customer record and give you the option to edit it.

Type "END" to return to the Program 3 menu selection.

Option: 32 — List Customer File by Customer Number

You will be asked if you wish to specify a range of numbers (Y or N)? If you answer "Y", enter the lowest and highest numbers you wish to see. If you wish to list only one customer enter that number as both lowest and highest. If you answer "N" you will be shown the entire Customer File.

You may list just names and customer numbers if you answer "Y" to the question: "Do you want just names and numbers (as opposed to all information) for each customer (Y or N)?" Otherwise the entire customer record will be displayed.

Option: 33 — List Customer File by Name

You may again list just names and customer numbers or the full information. The program will display the customer records in alphabetical order.

Option: 0 — Exit

Select this option to return to the Program Selection Menu.

MICROREC 4 — Print Aged Receivables

This program displays your Accounts Receivable in four categories:

- those outstanding between 0 and 30 days (since the date of invoicing);
- those outstanding between 31 and 60 days;
- those outstanding between 51 and 90 days;
- those outstanding over 90 days.

Information displayed is:
- invoice number
- customer number
- invoice date
- outstanding balance

You may choose to include also:
- customer name
- address
- invoice details

if you so desire.

You will also see a cash projection of the total money due you in each category.

You may print this report on the printer or simply display it on the screen.

MICROREC 5 — Post Transactions

This program will post the new invoices and payments in your Transaction File to your Master File. Before you do this you should back up your data by using the Duplicate Disk option of the Atari DOS (Option J). (See your Beginner's Guide for instructions on how to load the DOS.) You should do this as a safeguard, in case you post something incorrectly or lose your data due to hardware failure.

Before you actually post you will be given the option to make a "dry run" posting — that is, the program goes through all the motions of posting, telling you exactly what is being done with each record without really writing any of the data to the Master File. You may see messages during the dry run such as:

1 — added invoice 1905 to Master

2 — applied payment to invoice 1806

3 — added invoice 1062-A to Master

4 — ERROR no invoice #1905 for payment

5 — ERROR duplicate invoice 1620/F

Message #4 tells you that there is no invoice #1905 in your Master File to which to post the payment. In an actual posting this error would not occur because invoice 1905 would have actually already been posted (as shown by message #1). Since this is a dry run, however, the record was not actually posted to the Master File. Message #5 tells you that invoice #1620/F has already been posted and you are attempting to "double-post". When you see such an error message you should be alerted that you may be attempting to double-post your entire file. You will never receive error messages on duplicate payments, since it is entirely possible that you might wish to post several payments in the same amount to the same account.

To prevent the possibility of double-posting, run Option 62 in Program 6 to RE-INITIALIZE your Transaction File immediately after you post. This empties the Transaction File of all records and prepares it to accept records for the next Transaction period.

FOR USERS OF MICROLEDGER: When you actually post your Transaction File, the program will also create Journal File records for MICROLEDGER. You should now run the "Journalize and Accumulate" option in MICROLEDGER to post this Journal File to your Chart of Accounts, then use option 64 of Program 6 in MICROREC to RE-INITIALIZE your Journal File.

MICROREC 6 — Initialize A/R Files and/or Perform Periodic Purging of Master File

61 — Customer File

62 — Receivables Transaction File

63 — Receivables Master File

64 — Ledger Journal File for Receivables Transactions

65 — Purge Obsolete Data from Master File

(Options 61 thru 64 INITIALIZE or RE-INITIALIZE the file shown.)

Options: 61 — 64 Initialize Files

These options initialize or re-initialize all of your data files. You must "initialize" your files before you can enter data into them. The data disk you receive with your program already has intialized files, but you will want to re-initialize them before you attempt to enter your own data. This procedure will empty them of their current records and establish the appropriate dates for your file periods.

ALL FILES: If you use additional data disks, BE SURE THAT YOU INITIALIZE YOUR TRANSACTION FILE, MASTER FILE, CUSTOMER FILE and JOURNAL FILE (this last file must be initialized only if you wish to use MICROREC interactively with MICROLEDGER) on each data disk before you attempt to enter any data. If you do not do this you will lose valuable data. If you do not use MICROLEDGER, you should load the Atari DOS and use the DELETE FILE option to delete the journal file (see the Beginner's Guide for procedures).

TRANSACTION FILE: After you post (using Program 5) your Transaction records to your Master File you should immediately run Option 62 to Initialize your Transaction File. This will void the file of old records and prepare it to accept transaction records for the new period.

CUSTOMER FILE: You will normally only need to intitialize this file once — the first time you use the program. As Soon as you Initialize or Re-Initialize this file using Option 61 you must run Program 3 to add record #0 to your Customer File. Record #0 is actually the name and address of your own company, and is used as a header for your reports, invoices and statements. Be sure to enter your company information exactly as you want it to appear on these documents.

MASTER FILE: You will normally only Initialize this file once — the first time you use the program. You may use Option 65 to delete accounts in this file which you no longer need to retain on the disk.

Option: 65 — Purge Obsolete Data from Master File

Use this option to clear your Master File of records of invoices which have been fully paid which you no longer need to keep in file. (Remember, the Customer record will still exist in the Customer File, and you can always retrieve this record if you need to create new invoices for this customer.)

This option will purge the file of fully paid invoices (both the invoice record and all payment records) for invoices which have invoice dates on or before the date you type into the computer. REMEMBER: This purges only the fully paid invoices — it will not purge invoices with debit or credit balances. Be sure that you have already printed the statements for these customers, as the charges and credits which you purge here will no longer reflect in the statements.

STEP BY STEP

-INSTRUCTIONS-

MICROREC

STEP-BY-STEP INSTRUCTIONS

1. Initialize your files.

   Select Program 6 on the Program Selection Menu. When the program is loaded, run Option 61, 62 and 63 to Initialize your files. If you use MICROLEDGER in conjunction with MICROREC, also run Option 64 to Initialize your Journal File. If you do not use MICROLEDGER, use Option D on your DOS to DELETE the Journal File (see Beginner's Guide for procedures). Now all of your files are empty and ready to receive new data. Select Option 0 to return to the main Program Selection Menu.

2. Establish Header Record and Customer Records.

   Select Program 3, Option 31 to Examine/Edit Customer File. Type in "0" (zero) to force assignment of that number to your company. Enter your company name and address exactly as you wish it to appear on reports, invoices and statements, because the program uses this record as a title for your reports and documents. You may now hit RETURN to enter your first real customer record. Continue entering records until you have entered all customers (maximum 200) in the file. You may now run options 32 and 33 to LIST the Customer File by number or name (respectively). Print out the list of customers so that you will have the customer numbers at hand. If you spot mistakes in the data, return to Option 31 to edit the records. Select Option 0 to return to the main Program Selection Menu.

3. Add Invoices to the Transaction File.

   Select Program 1, Option 11 to add your open invoices to the Transaction File. On your first run of the program you will want to enter these in at least two batches (keeping in mind that your file handles a maximum of 50 records at any one time). The first batch will be those records for which you have already sent invoices and do not need to print new ones. The second batch should be those records for which you do want to print out invoices. Enter the first batch of records and go on to step 4. Skip Step 5 for this batch, and when you finish your actual posting return to step 4 to enter your second batch of records.

4. List your Transaction File.

   Run Option 13 of Program 1 to do this. If you need to make changes, run Option 12 to edit the file.

5. Print Invoices.

   Run Option 14 of Program 1 to do this. You may print them for the whole file or for one customer only by entering the

customer number. When your invoices are ready, type "END" to return to the main Program Selection Menu.

6. Back Up your Data

Use the Duplicate Disk option of the ATARI DOS contained on your disk to make a copy of your data disk. You should always do this prior to posting.

7. Post Your Transaction File to the Master File

Select Program 5 from the Program Selection Menu to post your Transaction records to the Master File. First do the "dry-run" posting to make sure that you have entered the records properly. Check that the invoices you are posting appear before the payment records in the file or the payments will not be applied correctly. Then go on to the actual posting.

8. List the Master file.

When you have posted, run Program 2, Option 22 to List the Master File. Check to see that your invoices and payments have been posted properly. If you need to make changes, run the editing option (21) to do so, or recover your backed-up files and re-post. (This will generate new and correct Journal record

9. Re-Initialize your Transaction File.

Run Program 6, Option 62 to re-initialize your Transaction File. Return to the Main Program Selection Menu.

10. FOR MICROLEDGER USERS ONLY: Journal Transfer

MICROLEDGER users should take this opportunity to post the Journal File, JOUREC, to the Chart of Accounts file. You may first LIST the Journal File by replacing the MICROREC program disk in Drive 1 with the MICROLEDGER program disk. Load the program. When the MICROLECGER main Program Selection Menu appears on the screen, type REC instead of a program number. Now select Program 3 to LIST JOUREC. When you have verified that the data are correct, run Program 4 to POST to the Chart of Accounts File. Replace the MICROLEDGER program disk with the MICROREC program disk in drive 2, and run Program 6, Option 64 to Re-Initialize the Journal File.

Note: You may wait until you have accumulated up to 200 records in JOUREC before you post; however, it is best to post it to MICROLEDGER immediately after running program 5 and then re-initialize the file. This way you will avoid any possibility of double-posting.

11. Print Aging Report and/or Customer Statements.

You may now run Program 4 to print a report of your aged receivables, or Option 23 of Program 2 to print Customer Statements.

These 11 steps should cover your complete first run of data. You may run Option 23 of Program 2 or Program 4 at any time you wish, but keep in mind that these programs read the Master File records only. If you have unposted records in your Transaction File, they will not be reflected in these reports.

GENERAL NOTES

You should not need to Re-Initialize your Customer File or Master File after the first Initialization. If you do Re-Initialize the Customer File, however, be sure to enter your own company again as record #0. When your Master File approaches 300 records, or whenever you wish to do this, run Option 65 to purge the Master File of paid invoice records and their corresponding payment records.

Warning: When adding new invoices to the Transaction File, be careful not to use the option to add and invoice for a NEW customer if the customer already exists in the Customer File. This will result in creating new customer records and customer number for the same customer, which will cause your reports and statements to contain inadequate information. To avoid this situation, keep a printout of the Customer File at hand when entering new invoices — or if you don't know the customer number, enter the customer name and the computer will search the Customer File for that customer.

COMPUMAX

MICRO BIZ

COMPUMAX INTEGRATED MICROBUSINESS SOFTWARE

MICRO BIZ is composed of six software packages, MICROLEDGER, MICROPAY, MICROREC, MICROINV, MICROPERS, and ORDER ENTRY. They may be purchased individually or in combination with other CompuMax packages, and may be contained on a single disk for use on systems which have sufficient space on the program disk: MICROPOLIS 1053 (in MICROPOLIS BASIC, MICROSOFT, CBASIC2); CROMEMCO; APPLE II dual density; and COMMODORE 8032 with DOS 2.0, BASIC4 with drive 8050.

Each module may be used alone to provide powerful recordkeeping services, or in combination with other modules for use as a comprehensive business accounting system. Two complementary methods of integrating the packages are available:

I. If MICROLEDGER is part of the system purchased the job stream is integrated as the General Ledger package, MICROLEDGER, receives data to update its files from the MICROPAY, MICROREC, MICROINV, and MICROPERS packages via the interactive Journal File.

II. If ORDER ENTRY is part of the packages purchased, the job stream is integrated as ORDER ENTRY furnishes update information *directly* to Accounts Payable, Accounts Receivable, and Inventory Control systems. In addition, ORDER ENTRY *indirectly* updates the General Ledger package (MICROLEDGER) through its interface with MICROPAY, MICROREC, and MICROINV.

The COMPUMAX business application programs are sophisticated systems with documentation written with the novice computer user in mind. They are easy to use, yet powerful in their capabilities. Moreover, COMPUMAX supplies the BASIC source code so that the programs are easy to modify.

COMPUMAX programs are available for:

TRS-80 Models I and II	CROMEMCO
APPLE II	MICROSOFT under CP/M
PET	CBASIC2 under CP/M
MICROPOLIS 1053/II	

COMPUMAX

COMPUMAX can supply you with:

MICROLEDGER, a general ledger system which performs the essential functions of dual entry bookkeeping and matches revenues and expenses. MICROLEDGER computes the TRIAL BALANCE, executes POSTING of journal transactions into the CHART OF ACCOUNTS, and outputs an AUDIT TRAIL. It also produces the PROFIT AND LOSS STATEMENT and the BALANCE SHEET. MICROLEDGER's Journal File is formatted so that it can utilize the Journal File data created by MICROPAY, MICROREC, MICROINV and MICROPERS.

MICROPAY, an accounts payable system which keeps records and updates transactions in accounts payable. MICROPAY sorts data by customer, by time period, or by single date, and computes cash requirements and prints checks. This program simultaneously creates entries for the MICROLEDGER Journal File.

MICROREC, an accounts receivable system which keeps and updates Accounts Receivable records, prints invoices, sorts data by customer, by time period, or by single date, and computes Cash Projections. MICROREC creates journal entries which communicate with the MICROLEDGER Journal File.

MICROINV, an inventory control system which establishes and updates inventory control records, produces the STOCK STATUS REPORT, showing standard inventory stock data and stock valuation and the ABC ANALYSIS, breaking down the inventory into groups by frequency of usage. MICROINV produces a JOB COST REPORT/MATERIALS showing allocation of materials used year-to-date by each job or work code. MICROINV also computes and provides Economic Order Quantities. The Journal entries communicate with the MICROLEDGER Journal File.

MICROPERS, a payroll/personnel program which keeps and updates records, computes payroll, prints the Payroll Register, and prints paychecks. MICROPERS produces the JOB COST REPORT/ LABOR, computes the quarterly 941 bank deposit and the annual W-2 run. Journal entries can be fed into the MICROLEDGER Journal File.

ORDER ENTRY, a package designed to assist in the control of purchasing and sales. ORDER ENTRY will keep records and produce documents for both areas, printing purchase orders and invoices and organizing your sales orders and purchase orders by record number, vendor, and customer. In addition, ORDER ENTRY is interactive with MICROPAY, MICROREC and MICROINV, permitting the user to automatically transfer all information necessary to update these systems.

APPENDIX A

SAMPLE RUN

```
 WELCOME TO MICROREC BY COMPUMAX


Please select program option:

1 Add to/List/Edit the A/R transaction
  file and/or Print Invoices
2 List/Edit the A/R Master file and/or
  Print Customer Statements
3 Add to/List/Edit the A/R customer
  file
4 Print Aged Receivables
5 Post Transaction file entries to
  A/R Master file and Journalize
6 Initialize A/R files and/or
  Perform periodic purging of
    Master file

0 QUIT


SELECT ?  6



  ...please wait...
MICROREC 6 -- (RE)INITIALIZE FILES


61 - CUSTOMER FILE
62 - RECEIVABLES TRANSACTION FILE
63 - RECEIVABLES MASTER FILE
64 - LEDGER JOURNAL FILE FOR
       RECEIVABLES TRANSACTIONS
65 - PURGE OBSOLETE DATA FROM MASTER
     FILE

 0 - EXIT


[ Options 61 thru 64 initialize the
    file shown. ]

  SELECT ?    63

 CAUTION:  this file is normally only
         initialized when starting
           a new receivables system!

Are you sure about this (Y OR N)? Y
```

```
MICROREC 6 -- (RE)NITIALIZE FILES


61 - CUSTOMER FILE
62 - RECEIVABLES TRANSACTION FILE
63 - RECEIVABLES MASTER FILE
64 - LEDGER JOURNAL FILE FOR
       RECEIVABLES TRANSACTIONS
65 - PURGE OBSOLETE DATA FROM MASTER
     FILE

 0 - EXIT


[ Options 61 thru 64 initialize the
    file shown. ]

  SELECT ?  64


 NOTE:  be sure you have posted the
      previous journal file to the
        chart of accounts file using
      MICROLEDGER before doing this
  Have you done so (Y OR N)? Y

Please enter the date of the start
of the period that this journal       fi
le will cover.
Date (MMDDYY) ?  10101        JAN 01,81


DATE OKAY (Y OR N)? Y

...please wait...
MICROREC 6 -- (RE)NITIALIZE FILES


61 - CUSTOMER FILE
62 - RECEIVABLES TRANSACTION FILE
63 - RECEIVABLES MASTER FILE
64 - LEDGER JOURNAL FILE FOR
       RECEIVABLES TRANSACTIONS
65 - PURGE OBSOLETE DATA FROM MASTER
     FILE

 0 - EXIT


[ Options 61 thru 64 initialize the
    file shown. ]

  SELECT ?  0


    ...please wait...
```

COMPUMAX

```
 WELCOME TO MICROREC BY COMPUMAX


Please select program option:

1 Add to/List/Edit the A/R transaction
  file and/or Print Invoices
2 List/Edit the A/R Master file and/or
  Print Customer Statements
3 Add to/List/Edit the A/R customer
  file
4 Print Aged Receivables
5 Post Transaction file entries to
  A/R Master file and Journalize
6 Initialize A/R files and/or
  Perform periodic pursing of
    Master file

0 QUIT


SELECT ?   1



  ...please wait...
MICROREC 1 -- TRANSACTIONS


11 - ADD NEW INVOICES AND/OR PAYMENTS
   AGAINST EXISTING INVOICES
12 - EDIT RECORDS IN TRANSACTION FILE
13 - LIST TRANSACTION FILE
14 - PRINT INVOICES
 0 - EXIT


SELECT AN OPTION ?  13

   ...please wait...
LIST TRANSACTION FILE



OUTPUT TO GO TO PRINTER (Y OR N)? Y

---------------------------------------


customer: number 001
        : ROSE & CO.
```

COMPUMAX

invoice: number 1905
: customer p.o.# 0105-CW
: date NOV 05,80
: total amt $218.50
terms: NET 30

item	amount	DR/CR	acct
CRT, 12", B&W	$200.00	CR	710
sales tax	$13.00	CR	330
shipping	$5.50	CR	320
accts receivable	$218.50	DR	130

---

customer: number 002
: BROWN INDUSTRIES

invoice: number 1906
: customer p.o.# VERBAL
: date DEC 06,80
: total amt $151.10
terms: NET 60

item	amount	DR/CR	acct
MICROREC PACKAGE	$140.00	CR	710
sales tax	$9.10	CR	330
shipping	$2.00	CR	320
accts receivable	$151.10	DR	130

---

customer: number 003
: B.T.C. RESEARCH

invoice: number 1907
: customer p.o.# VERBAL
: date JAN 07,81
: total amt $151.10
terms: 2% 10, NET 30

item	amount	DR/CR	acct
ATARI uLEDGER	$140.00	CR	710
sales tax	$9.10	CR	330
shipping	$2.00	CR	320
accts receivable	$151.10	DR	130

---

customer: number 001
: ROSE & CO.

invoice: number 1905
: customer p.o.#
: date DEC 10,80

remarks:

payment amount: $175.00
DR acct # 110
CR acct # 130

---

customer: number 002
: BROWN INDUSTRIES

invoice: number 1906
: customer p.o.#
: date JAN 02,81

remarks:

payment amount: $151.10
DR acct # 110
CR acct # 130

```
MICROREC 1 — TRANSACTIONS


11 - ADD NEW INVOICES AND/OR PAYMENTS
     AGAINST EXISTING INVOICES
12 - EDIT RECORDS IN TRANSACTION FILE
13 - LIST TRANSACTION FILE
14 - PRINT INVOICES
 0 - EXIT


SELECT AN OPTION ?  14

   ...please wait...
You may print...

- all invoices in transaction file by
hitting just  RETURN
- all invoices for a single customer
by entering a customer number
- exit by entering 'END'

Your entry ?
OUTPUT TO GO TO PRINTER (Y OR N)? Y
          I N V O I C E

from:                  Invoice 1905
COMPUMAX, INC.
467 HAMILTON AVE.
PALO ALTO         CA  94301

to:
ROSE & CO.                        [001]
560 N. BERNARDO AVE
ATTN: C.L.ROSE
MTN VIEW          CA  94041


terms:                  date:
NET 30                  NOV 05,80

description:                    amount

CRT, 12", B&W                  $200.00
sales tax                       $13.00
shipping                         $5.50

*** TOTAL ***                  $218.50

          I N V O I C E

from:                  Invoice 1906
COMPUMAX, INC.
467 HAMILTON AVE.
PALO ALTO         CA  94301
```

COMPUMAX

to:
BROWN INDUSTRIES [002]
1218 FAIR OAKS AVE.
SUNNYVALE CA 94086

terms: date:
NET 60 DEC 06,80

description: amount

MICROREC PACKAGE $140.00
sales tax $9.10
shipping $2.00

*** TOTAL *** $151.10

I N V O I C E

from: Invoice 1907
COMPUMAX, INC.
467 HAMILTON AVE.
PALO ALTO CA 94301

to:
B.T.C. RESEARCH [003]
1360 CRANE ST.
MENLO PARK CA 94025

terms: date:
2% 10, NET 30 JAN 07,81

description: amount

ATARI uLEDGER $140.00
sales tax $9.10
shipping $2.00

*** TOTAL *** $151.10

You may print...

- all invoices in transaction file by hitting just RETURN
- all invoices for a single customer by entering a customer number
- exit by entering 'END'

Your entry ? END

```
MICROREC 1 -- TRANSACTIONS


11 - ADD NEW INVOICES AND/OR PAYMENTS
     AGAINST EXISTING INVOICES
12 - EDIT RECORDS IN TRANSACTION FILE
13 - LIST TRANSACTION FILE
14 - PRINT INVOICES
 0 - EXIT


SELECT AN OPTION ?  0


    ...please wait...
```

```
 WELCOME TO MICROREC BY COMPUMAX


Please select program option:

1 Add to/List/Edit the A/R transaction
  file and/or Print Invoices
2 List/Edit the A/R Master file and/or
  Print Customer Statements
3 Add to/List/Edit the A/R customer
  file
4 Print Aged Receivables
5 Post Transaction file entries to
  A/R Master file and Journalize
6 Initialize A/R files and/or
  Perform periodic purging of
    Master file

0 QUIT


SELECT ? 5



 ...Please wait...
MICROREC 5 -- POST TRANSACTIONS



Before using this program, you should,
make a backup of your data files by
  using the DUPLICATE DISK option of
ATARI DOS.  DO NOT  use the copy     fi
les option!

Are your files properly backed up?
Please respond (Y OR N)? Y

If you wish, you may make a 'DRY RUN'
of this posting.  That is, all of
  the checking and totalling of an
actual posting take place, but no
  files are changed.  This allows you
to check for errors without hurting   va
luable data.
DO YOU WANT A 'DRY RUN' (Y OR N)? Y


     ...Please wait...


DO YOU WISH ALL ERROR LOGGING

OUTPUT TO GO TO PRINTER (Y OR N)? Y
```

```
---BEGINNING POSTING---
<< DRY RUN ONLY >>
added invoice 1905     to master
added invoice 1906     to master
added invoice 1907     to master
 ERROR  no invoice # 1905    for pmt
 ERROR  no invoice # 1906    for pmt
----POSTING COMPLETE----
```

Since this was not an actual posting, invoices 1905 and 1906 were not actually added to the Master File. Therefore they were not found when the program attempted to post the payment, resulting in error messages. In an actual posting, however, the invoices would have been actually posted, and the payments would have been applied.

```
----POSTING COMPLETE----


 DRY RUN COMPLETE
POST AGAIN (Y OR N)? Y
MICROREC 5 -- POST TRANSACTIONS


Before using this program, you should
make a backup of your data files by
  using the DUPLICATE DISK option of
ATARI DOS.   DO NOT  use the copy     fi
les option!

Are your files properly backed up?
Please respond (Y OR N)? Y

If you wish, you may make a 'DRY RUN'
of this posting.  That is, all of
  the checking and totalling of an
actual posting take place, but no
  files are changed.  This allows you
to check for errors without hurting   va
luable data.
DO YOU WANT A 'DRY RUN' (Y OR N)? N


     ...please wait...
```

```
DO YOU WISH ALL ERROR LOGGING

OUTPUT TO GO TO PRINTER (Y OR N)? Y



---BEGINNING POSTING---
added invoice 1905     to master
added invoice 1906     to master
added invoice 1907     to master
applied payment to invoice 1905
applied payment to invoice 1906
----POSTING COMPLETE----
```

Notice that in the actual posting the program was able to apply the payments to invoices 1905 and 1906, since those invoices had been posted to the Master File immediately beforehand.

```
----POSTING COMPLETE----


    ...please wait...
 WELCOME TO MICROREC BY COMPUMAX


Please select program option:

1 Add to/List/Edit the A/R transaction
  file and/or Print Invoices
2 List/Edit the A/R Master file and/or
  Print Customer Statements
3 Add to/List/Edit the A/R customer
  file
```

```
4 Print Aged Receivables
5 Post Transaction file entries to
  A/R Master file and Journalize
6 Initialize A/R files and/or
  Perform periodic purging of
    Master file

0 QUIT


SELECT ?   2


 ...please wait...



MICROREC 2 -- THE MASTER FILE


21 - EDIT RECORDS IN MASTER FILE
22 - LIST MASTER FILE
23 - PRINT STATEMENTS
 0 - EXIT


SELECT AN OPTION ?   22

   ...please wait...
LIST MICROREC MASTER RECEIVABLES FILE


DO YOU WISH TO LIST ONLY A GROUP OF
ONE OR MORE CUSTOMERS (Y OR N)? N
DO YOU WISH TO LIST ONLY A GROUP OF
ONE OR MORE INVOICES (Y OR N)? N
DO YOU WISH TO LIST ONLY A GROUP OF
INVOICES ENTERED BETWEEN TWO GIVEN    DA
TES (Y OR N)? N

OUTPUT TO GO TO PRINTER (Y OR N)? Y
customer: number 001
        : ROSE & CO.

 invoice: number 1905
        : customer p.o.# 0105-CW
        : date NOV 05,80
terms: NET 30

description:                      amount
CRT, 12", B&W                    $218.50

NOV 05,80 Payment # 1            $175.00


.....
```

```
customer: number 002
        : BROWN INDUSTRIES

 invoice: number 1906
        : customer p.o.# VERBAL
        : date DEC 06,80
terms: NET 60

description:                    amount
MICROREC PACKAGE               $151.10

DEC 06,80 Payment # 1          $151.10


.....................................


customer: number 003
        : B.T.C. RESEARCH

 invoice: number 1907
        : customer p.o.# VERBAL
        : date JAN 07,81
terms: 2% 10, NET 30

description:                    amount
ATARI uLEDGER                  $151.10

---No Payments Received Yet---



.....................................
Do you wish to do another Master File
listing now (Y OR N)? N
MICROREC 2 -- THE MASTER FILE


21 - EDIT RECORDS IN MASTER FILE
22 - LIST MASTER FILE
23 - PRINT STATEMENTS
 0 - EXIT


SELECT AN OPTION ? 23

   ...please wait...
PRINT CUSTOMER STATEMENTS


Do you wish to PRINT STATEMENTS for
only a group of one or more            cu
stomers (Y OR N)? N

OUTPUT TO GO TO PRINTER (Y OR N)? Y
.....................................
```

COMPUMAX

S T A T E M E N T

from:
COMPUMAX, INC.
467 HAMILTON AVE.
PALO ALTO CA 94301

to:
ROSE & CO. [001]
560 N. BERNARDO AVE
ATTN: C.L.ROSE
MTN VIEW CA 94041

Invoice# Date	Description PO#/note	Amount
1905	CRT, 12", B&W	
NOV 05,80	0105-CW	$218.50
DEC 10,80	payment	$175.00
	BALANCE	$43.50

Please pay this balance, Thank you.

.....

S T A T E M E N T

from:
COMPUMAX, INC.
467 HAMILTON AVE.
PALO ALTO CA 94301

to:
BROWN INDUSTRIES [002]
1218 FAIR OAKS AVE.
SUNNYVALE CA 94086

Invoice# Date	Description PO#/note	Amount
1906	MICROREC PACKAGE	
DEC 06,80	VERBAL	$151.10
JAN 02,81	payment	$151.10
	BALANCE	$0.00

No payment is necessary, Thank you.

.....

S T A T E M E N T

from:
COMPUMAX, INC.
467 HAMILTON AVE.
PALO ALTO CA 94301

to:
B.T.C. RESEARCH [003]
1360 CRANE ST.
MENLO PARK CA 94025

Invoice# Date	Description PO#/note	Amount
1907 JAN 07,81	ATARI uLEDGER VERBAL	$151.10
	BALANCE	$151.10

Please pay this balance, Thank you.

Do you want to print more customer
statements (Y OR N)? N
MICROREC 2 -- THE MASTER FILE

21 - EDIT RECORDS IN MASTER FILE
22 - LIST MASTER FILE
23 - PRINT STATEMENTS
0 - EXIT

SELECT AN OPTION ? 0

...please wait...

```
WELCOME TO MICROREC BY COMPUMAX


Please select program option:

1 Add to/List/Edit the A/R transaction
  file and/or Print Invoices
2 List/Edit the A/R Master file and/or
  Print Customer Statements
3 Add to/List/Edit the A/R customer
  file
4 Print Aged Receivables
5 Post Transaction file entries to
  A/R Master file and Journalize
6 Initialize A/R files and/or
  Perform periodic purging of
    Master file

0 QUIT


SELECT ?  4

  ...please wait...
PRINT AGED RECEIVABLES



TODAY'S DATE (MMDDYY) ?  JAN 10,81

DATE OKAY (Y OR N)? Y

Invoice Number, Customer Number,
Invoice Date, and Outstanding
  Balance will be shown for each
invoice.

Would you also like to see Customer
Names (Y OR N)? Y
Would you also like to see Addresses,
etc.  (Y OR N)? N
Would you also like to see Details for
each Invoice (Y OR N)? N


OUTPUT TO GO TO PRINTER (Y OR N)? Y
   ...please wait...

          AGED RECEIVABLES
               for

       COMPUMAX, INC.
       467 HAMILTON AVE.
       PALO ALTO       CA 94301
```

COMPUMAX

A/R AGED TRIAL BALANCE ON JAN 10,81

INVOICES OUTSTANDING, 0 TO 30 DAYS

Invoice#	Cu#	Inv.Date	Balance
	Customer Name		
1907	003	JAN 07,81	$151.10
	B.T.C. RESEARCH		
*** CASH PROJECTION ***			$151.10

A/R AGED TRIAL BALANCE ON JAN 10,81

INVOICES OUTSTANDING, 31 TO 60 DAYS

Invoice#	Cu#	Inv.Date	Balance
	Customer Name		
*** CASH PROJECTION ***			$0.00

A/R AGED TRIAL BALANCE ON JAN 10,81

INVOICES OUTSTANDING, 61 TO 90 DAYS

Invoice#	Cu#	Inv.Date	Balance
	Customer Name		
1905	001	NOV 05,80	$43.50
	ROSE & CO.		
*** CASH PROJECTION ***			$43.50

COMPUMAX

A/R AGED TRIAL BALANCE ON JAN 10,81

INVOICES OUTSTANDING, OVER 90 DAYS

Invoice#	Cu#	Inv.Date	Balance
Customer Name			

*** CASH PROJECTION *** $0.00

ANOTHER TRIAL BALANCE (Y OR N)? N

...please wait...

APPENDIX B

* CUSTOMIZING FOR PERSONAL USE*

Because not all users need the same features from an Accounts Receivable package, we have designed and prepared this software with the customizer in mind. We have included liberal remark statements in the code and assigned easily identifiable variable names. Record structures are provided to assist you in your program changes, and extra fields are available in the header records. Lines 1-999 are common to all programs so that modifications you make can be more easily implemented in all programs. We have done all we can to facilitate program changes and we invite you to make the modifications you need. Be aware, however, that our program support service cannot be extended to cover programs that have been modified in any way (except for changes in default debit and credit numbers and updates to tax rates in MICROPERS).

Changing Default Debit and Credit Account Numbers

These are contained in lines 1050-1060 of REC 1. If you do not use these numbers you may change the program to loop around the prompts in the appropriate programs. In this case you must delete the Journal File.

Output Formatting for Invoices and Statements

You may change the printer formatting routines in REC 1 to modify invoice formatting for particular business forms. Change routines in REC 2 to modify statement formatting.

You may modify the output format yourself for an 80-column printer, or contact Compumax regarding an 80-column version.

Using Additional Disk Drives

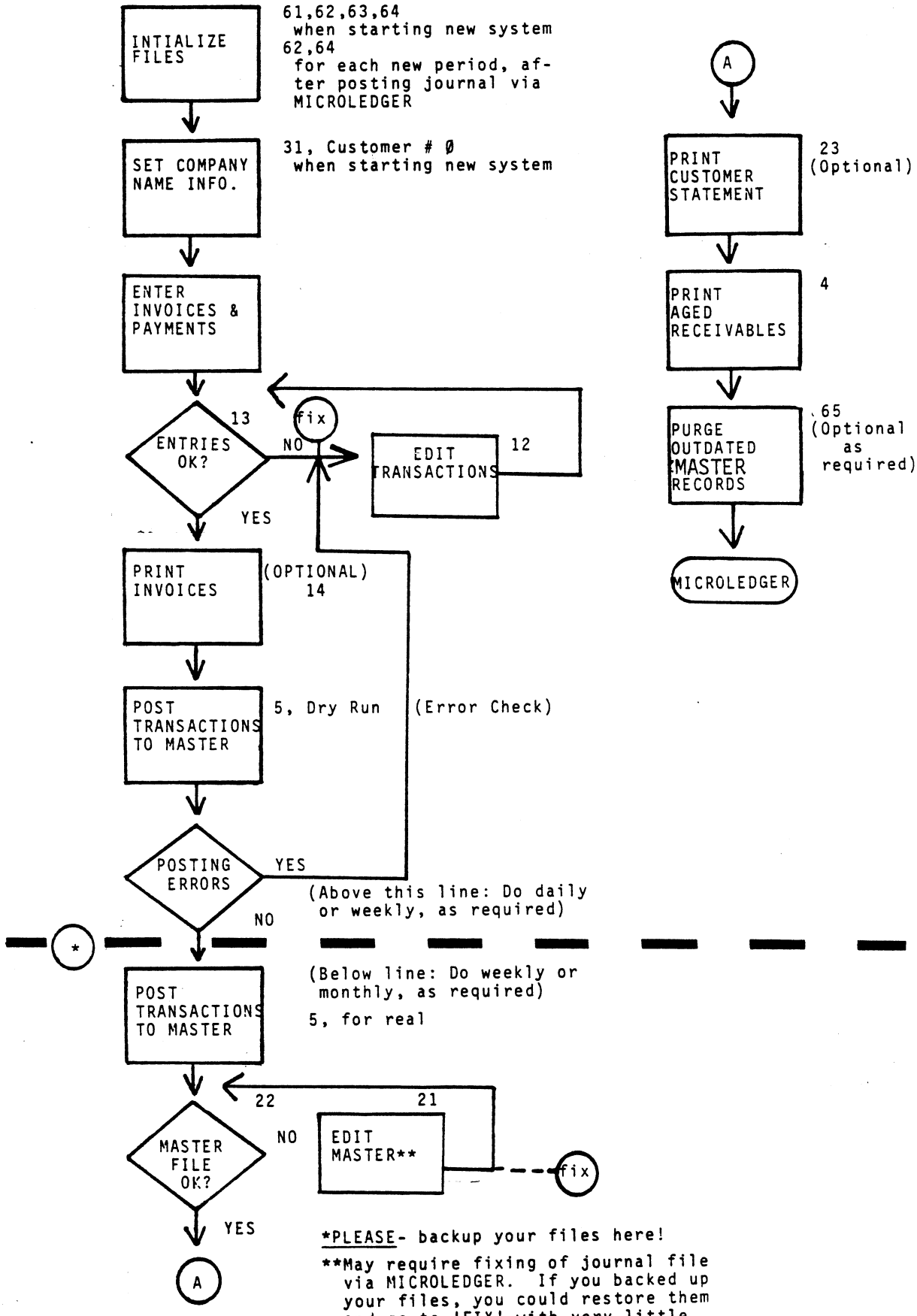
Lines 350-390 and 900-999 in all programs contain the drive assignments for the various files. These must be changed consistently in all programs. Do not attempt to change the name or drive assignment of RECMAST.DAT or RECMAST.NDX. If you use 3 drives, we recommend that you assign the Journal File and Customer File to Drive 3. This will allow approximately 260 additional records for your drive 2 files. If you do not use the Journal File (and delete it) you have the potential for about 65 additional records in your Master File.

Changing File Names and Sizes

Lines 400-500 in all programs refer to the maximum number of records for each file.

*Dealers see Licensing Agreement for terms of customization for resale.

MICROREC Procedure Flowchart

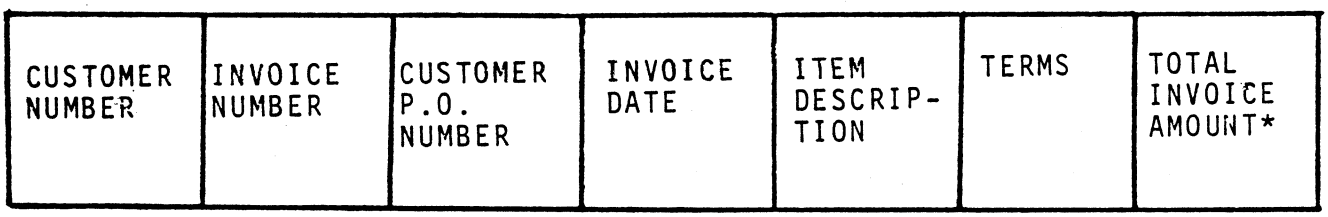


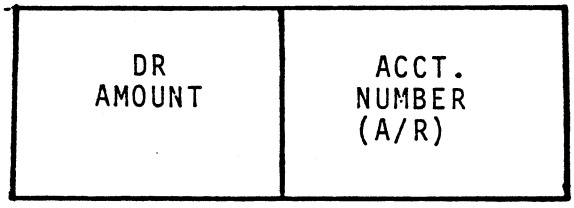
*PLEASE- backup your files here!

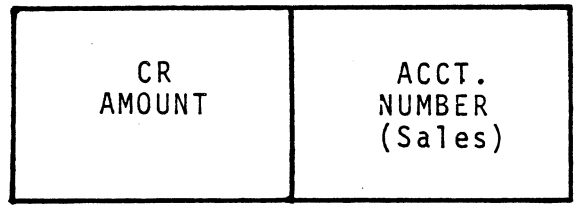
**May require fixing of journal file via MICROLEDGER. If you backed up your files, you could restore them and go to 'FIX' with very little Hassle!!

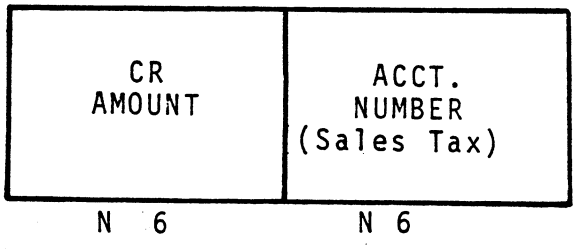
TRANSACTION FILE "RECFIL"

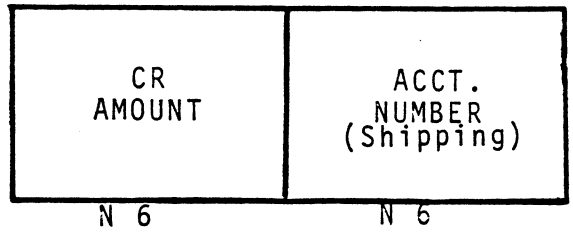
RECORD STRUCTURE









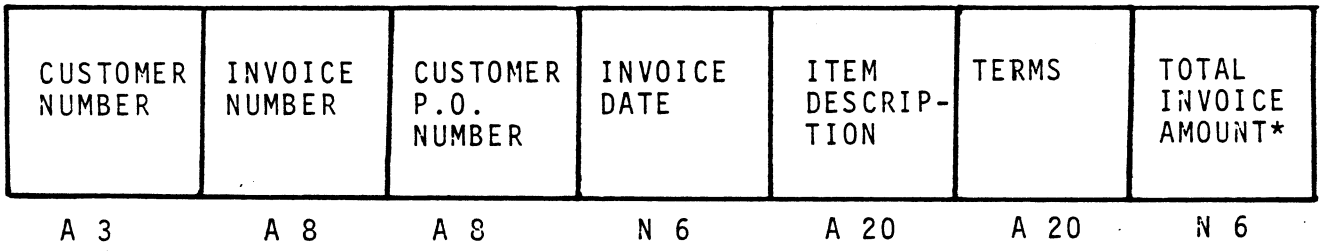


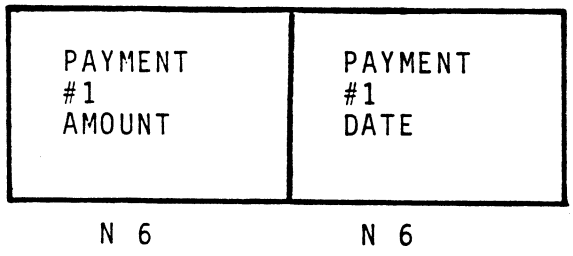
HEADER RECORD

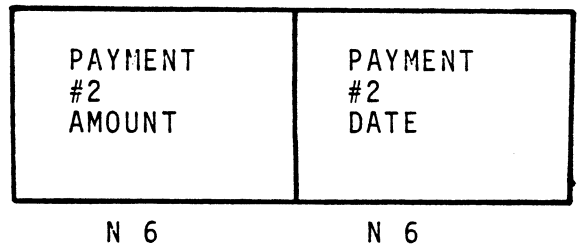
Format is the same as Transaction File Records, but only * is used and its meaning is "number of active records in file".

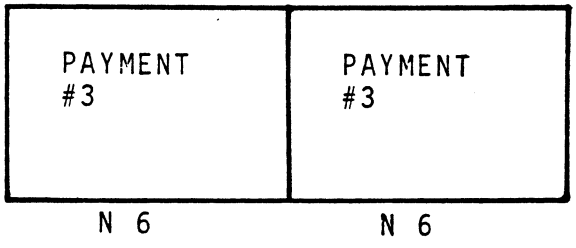
MASTER FILE "RECMAST"

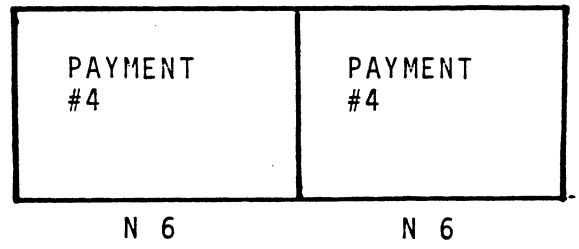
RECORD STRUCTURE









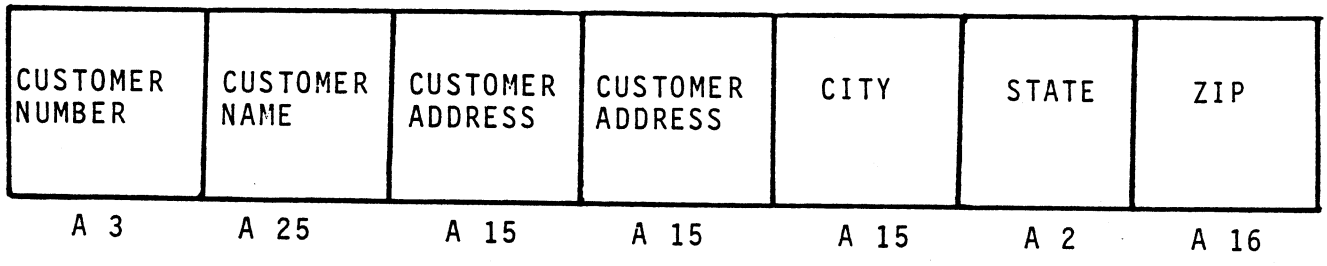


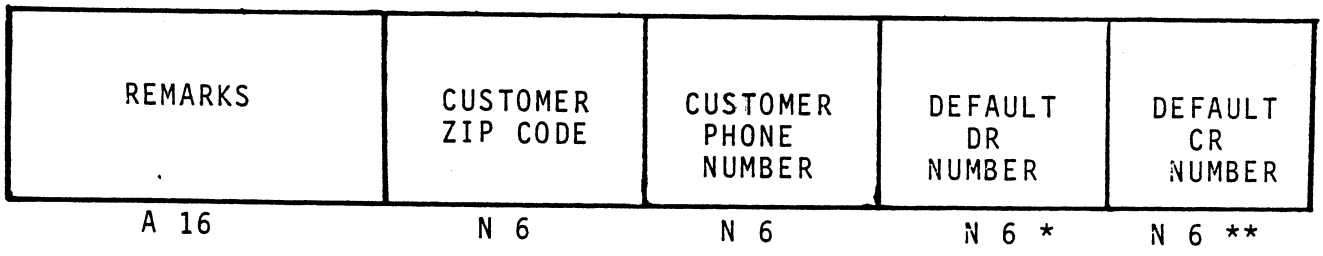
HEADER RECORD

Format the same as Master File Records, but only * is used meaning "number of active records in file".

CUSTOMER FILE

RECORD STRUCTURE





HEADER RECORD

Owner record. This record is the same as the customer record, except that * becomes "number of customers currently in file" and ** becomes "highest customer number in file". Extra fields are available.

```
10 REM -- MICROREC --
20 REM ACCOUNTS RECEIVABLE PROGRAM       FROM COMPUMAX ASSOCIATES, INC.
30 REM 467 HAMILTON AVE.
40 REM PALO ALTO, CA 94301
50 REM COPYRIGHT (C) 1980, COMPUMAX
60 REM
70 REM UNDER PROTECTION OF CALIFORNIA TRADE SECRET LAW.  DO NOT COPY, RENAME, CHANGE, CONVERT, OR EXPAND
80 REM FOR RESALE WITHOUT WRITTEN AGREEMENT WITH COMPUMAX.
90 REM ------------------------------
1000 REM xxxxxxxxxxxxxxxxxxxxxxxxxxxxx
1010 REM x
1020 REM x MICROREC --- THE MENU
1030 REM x
1040 REM xxxxxxxxxxxxxxxxxxxxxxxxxxxxx
1070 DIM F$(20)
1080 GOSUB 9000:REM   DON'T FORGET THIS!!!
1099 TRAP 1099
1100 GRAPHICS 0:? " WELCOME TO MICROREC BY COMPUMAX ":? :? :? "Please select program option;":?
1110 ? "1 Add to/List/Edit the A/R transaction    file and/or Print Invoices"
1120 ? "2 List/Edit the A/R Master file and/or    Print Customer Statements"
1130 ? "3 Add to/List/Edit the A/R customer       file"
1140 ? "4 Print Aged Receivables"
1150 ? "5 Post Transaction file entries to        A/R Master file and Journalize"
1160 ? "6 Initialize A/R files and/or             Perform periodic purging of":? "    Master file"
1190 ? :? "0 QUIT"
1200 ? :? :? "SELECT ";:INPUT OPT
1210 IF OPT THEN 1300
1220 GRAPHICS 18:? #6:? #6:? #6;"thank you for using"
1230 ? #6:? #6:? #6;"     MICROREC"
1240 ? #6:? #6:? #6;"        by"
1250 ? #6;"  C O M P U M A X"
1260 POKE 764,255
1270 IF PEEK(764)=255 THEN 1270
1280 NEW
1300 REM GOT AN OPTION
1310 IF OPT=-467 THEN GOSUB 9900:RUN
1320 IF OPT<1 OR OPT>7 OR OPT<>INT(OPT) THEN 1099
1330 TRAP 1500
1340 F$="D1:REC?.SAV":F$(7,7)=CHR$((OPT+48)
1350 OPEN #5,4,0,F$:CLOSE #5
1360 GRAPHICS 2
1370 ? #6:? #6:? #6;"     MICROREC"
1380 ? #6:? #6:? #6;"        by"
1390 ? #6;"  C O M P U M A X"
1400 ? :? :? :? :? "...please wait..."
1410 TRAP 40000
1420 RUN F$
1430 STOP
1500 REM OOPS
1510 GRAPHICS 0:? :? :? " ERROR:  REQUESTED PROGRAM NOT ON DISK":? :?
1520 ? "ENSURE THAT GOOD COPY OF PROGRAM":? "       '";F$(4);"'"
1530 ? "IS ON DISK DRIVE NUMBER ";F$(2,2)
1540 ? :? :? "TYPE 'RUN' WHEN ALL IS READY":? :? :END
```

```
9000 REM SET UP USR FOR BGET AND BPUT
9010 ADDR=1664:RESTORE 9100
9020 READ MEM:IF MEM>=0 THEN POKE ADDR,MEM:ADDR=ADDR+1:GOTO 9020
9030 RETURN
9100 DATA 160,7,208,2,160,11,104,201,3,208,46,104,104,41,7,10,10,10,10,170,104
9120 DATA 157,69,3,104,157,68,3,104,157,73,3,104,157,72,3,152,157,66,3,138,72
9130 DATA 32,86,228,104,170,189,67,3,133,212,169,0,133,213,96,170,202,48,5,104,104
9140 DATA 76,186,6,169,255,133,212,133,213,96,0,-1
9900 REM TURN ON PRINTER TO ECHO E:
9910 POKE 838,247:POKE 839,6
9920 RESTORE 9980:ADDR=1784
9930 READ MEM:IF MEM>=0 THEN POKE ADDR,MEM:ADDR=ADDR+1:GOTO 9930
9940 RETURN
9980 DATA 72,32,164,246,104,76,167,238,-1
```

```
10 REM — MICROREC —
20 REM ACCOUNTS RECEIVABLE PROGRAM       FROM COMPUMAX ASSOCIATES, INC.
30 REM 467 HAMILTON AVE.
40 REM PALO ALTO, CA 94301
50 REM COPYRIGHT (C) 1980, COMPUMAX
60 REM
70 REM UNDER PROTECTION OF CALIFORNIA TRADE SECRET LAW.  DO NOT COPY, RENAME, CHANGE, CONVERT, OR EXPAND
80 REM FOR RESALE WITHOUT WRITTEN AGREEMENT WITH COMPUMAX.
90 REM ----------------------------
100 REM RCOMMON — CODE COMMON TO ALL      MICROREC MODULES
105 REM
110 REM SUBROUTINE ADDRESSES
120 IGET=505:BGET=510:IPUT=515:BPUT=520
125 JIGET=530:JIPUT=540:CIGET=550:CIPUT=560:RIGET=570:RIPUT=580
150 PDATE=800:PRETTY=825:PRQUERY=860:YESNO=850:GOBACK=875
160 LET READCIX=900:WRITECIX=910:LET READJIX=920:WRITEJIX=930:LET READRIX=940:WRITERIX=950
200 REM DIMENSION, ETC.
210 DIM QD$(9),FMT$(40),F2$(15),BLANK$(40):BLANK$=" ":BLANK$(40)=" ":BLANK$(2,39)=BLANK$
220 DIM MONTH$(40):MONTH$="??JANFEBMARAPRMAYJUNJULAUGSEPOCTNOVDEC"
290 C100=100:IE7=10000000:ZERO=0:LET ONE=1:UNTRAP=40000:YES=ONE:NO=ZERO
292 PR=5:IN=4:OUT=8
350 REM FILE NAMES, DATA FILES ONLY
351 REM NAMES OF INDEX FILES ARE
352 REM IN LINES 900-999
360 DIM CUFN$(15):CUFN$="D2:CUSTFILE.DAT"
370 DIM JFN$(15):JFN$="D2:JOUREC.DAT"
380 DIM RFN$(15):RFN$="D2:RECFIL.DAT"
390 DIM RMFN$(15):RMFN$="D2:RECMAST.DAT"
400 REM ===== RECORD LAYOUTS ========= .
409 REM ......JOURNAL FILE ........... .
410 DIM JACCT$(3),JDESC$(30),JDATE(ZERO),JAMT(ZERO),JDATE2(ZERO):JLEN=45
415 JMAX=200:JADR=ADR(JACCT$)
419 REM .....CUSTOMER FILE ........... .
420 DIM CNUM$(3),CNAME$(25),CADDR1$(25),CADDR2$(15),CCITY$(15),CSTATE$(2),CREM$(16),CDAT(4):CULEN=125
425 CMAX=200:CADR=ADR(CNUM$)
429 REM .....RECFILE AND RECMAST..... .
430 DIM RCNUM$(3),RINV$(8),RPO$(8),RDATE(ZERO),RDESC$(20),RTERM$(20),RAMT(ZERO),RDAT(9):RLEN=125
435 RMAX=50:LET RADR=ADR(RCNUM$):REM FOR RECFIL
440 MRMAX=300:REM FOR RECMAST
480 IF PEEK(1664)<>160 THEN GOTO GOBACK
499 OPEN #ONE,4,ZERO,"K:":GOTO 1000
500 REM ... GET AND PUT ROUTINES ..... .
505 QI=QI-IE7*INT(QI/IE7):QT=INT(QI/1000):QI=QI-1000*QT:POINT #QF,QT,QI
510 QT=USR(1664,QF,QA,QL):IF QT=ONE OR QT=3 THEN RETURN
511 PRINT " BAD BGET...STATUS ";QT:STOP
515 QI=QI-IE7*INT(QI/IE7):QT=INT(QI/1000):QI=QI-1000*QT:POINT #QF,QT,QI
520 QT=USR(1668,QF,QA,QL):IF QT=ONE OR QT=3 THEN RETURN
521 PRINT " BAD BPUT...STATUS ";QT:STOP
530 QA=JADR:QL=JLEN:QF=4:GOTO IGET
540 QA=JADR:QL=JLEN:QF=4:GOTO IPUT
550 QA=CADR:QL=CULEN:QF=3:GOTO IGET
560 QA=CADR:QL=CULEN:QF=3:GOTO IPUT
570 QA=RADR:QL=RLEN:QF=2:QS=ASC(KEY$(12))*256+ASC(KEY$(13)):QT=ASC(KEY$(14)):POINT #QF,QS,QT:GOTO BGET
```

```
580 QA=RADR:QL=RLEN:QF=2:QS=ASC(KEY$(12))*256+ASC(KEY$(13)):QT=ASC(KEY$(14)):POINT #QF,QS,QT:GOTO BPUT
799 REM .....MISCELLANEOUS ROUTINES... .
800 REM Print DATE
805 QM=INT(QDATE/10000):QT=QDATE-QM*10000:QD=INT(QT/C100):QY=QT-QD*C100:IF QM<1 OR QM>12 THEN QD$="???":GOTO 810
807 QT=10000*QY+100*QM+QD:QD$=MONTH$(QM*3,QM*3+2)
810 QD$(4)=STR$(QD+C100):QD$(4,4)=" "
820 QD$(7)=STR$(C100+QY):QD$(7,7)=",":RETURN
825 REM PRETTY formatted print
827 IF ABS(QN)>=1000000000 THEN FMT$=STR$(QN):RETURN
829 QT=INT(ABS(QN)*C100+0.5):F2$=" $":IF QN<0 THEN F2$="($"
831 F2$(3)=STR$(INT(QT/C100)):F2$(LEN(F2$)+ONE)=".":QT=QT-C100*INT(QT/C100)
833 FMT$=STR$(C100+QT):F2$(LEN(F2$)+ONE)=FMT$(2,3):FMT$=BLANK$:FMT$(15-LEN(F2$))=F2$
835 IF QN<ZERO THEN FMT$(15)=")"
837 RETURN
850 REM YESNO
853 ? "(Y OR N)? ";
855 GET #ONE,QYN:IF QYN=89 OR QYN=121 THEN ? "Y";:QYN=YES:RETURN
857 IF QYN=78 OR QYN=110 THEN ? "N";:QYN=NO:RETURN
859 ? CHR$(253);:GOTO 855
860 REM ASK FOR AND OPEN PRINT FILE
861 CLOSE #PR
862 PRFLAG=NO:FMT$="E:":? :? "OUTPUT TO GO TO PRINTER ";:GOSUB YESNO:? :IF QYN THEN FMT$="P:":PRFLAG=YES
864 OPEN #PR,8,ZERO,FMT$:RETURN
875 REM BACK TO MAMA
877 GRAPHICS 2:PRINT #6:PRINT #6:PRINT #6;"     MICROREC":PRINT #6:PRINT #6:PRINT #6;"        by"
879 PRINT #6;"  C O M P U M A X":? :? :? :? "    ...please wait...":TRAP 881:RUN "D1:MICROREC"
881 ? :? "Put disk with 'MICROREC' in D1,please":? :? "Have you done so ";:GOSUB YESNO:? :IF QYN THEN GOTO GOBACK
883 GOTO 881
900 QF=7:OPEN #QF,IN,ZERO,"D2:CUSTFILE.NDX":DIM CIX$(1),CIX(CMAX):QA=ADR(CIX$)+ONE:QL=6*(CMAX+ONE)
902 GOSUB BGET:CLOSE #QF:RETURN
910 QF=7:OPEN #QF,IN+OUT,ZERO,"D2:CUSTFILE.NDX":QA=ADR(CIX$)+ONE:QL=6*(CMAX+ONE):GOSUB BPUT:CLOSE #QF:RETURN
920 QF=7:OPEN #QF,IN,ZERO,"D2:JOUREC.NDX":QA=JADR+33:QL=6:GOSUB BGET
922 QT=INT(JDATE(ZERO)/1E7):IF QT=ZERO THEN QT=JMAX
923 DIM JIX$(ONE),JIX(QT+ONE):JIX(ZERO)=JDATE(ZERO)
924 QA=ADR(JIX$)+7:QL=6*QT:GOSUB BGET:CLOSE #QF:RETURN
930 QF=7:OPEN #QF,IN+OUT,ZERO,"D2:JOUREC.NDX":QA=ADR(JIX$)+ONE:QL=6*(JMAX+ONE):GOSUB BPUT:CLOSE #QF:RETURN
940 QF=7:OPEN #QF,IN,ZERO,"D2:RECFIL.NDX":QL=14*(RMAX+ONE):DIM RIX$(QL):QA=ADR(RIX$)
942 RIX$(QL)="?":GOSUB BGET:CLOSE #QF:RETURN
950 QF=7:OPEN #QF,IN+OUT,ZERO,"D2:RECFIL.NDX":QA=ADR(RIX$):QL=14*(RMAX+ONE):GOSUB BPUT:CLOSE #QF:RETURN
1000 REM xxxxxxxxxxxxxxxxxxxxxxxxxxxx
1001 REM x
1002 REM x REC1 -- TRANSACTION FILE
1003 REM x         EDIT/LIST/ETC.
1004 REM x
1005 REM xxxxxxxxxxxxxxxxxxxxxxxxxxxx  .
1030 DIM TEMP$(40),KEY$(14)
1050 ACCTSHIP=320:ACCTTAX=330:ACCTPMT=110
1060 DEFACCTAR=130:DEFACCTSALE=710
1100 REM MENU
1110 GRAPHICS ZERO:? "MICROREC 1 -- TRANSACTIONS":? :?
1120 ? "11 - ADD NEW INVOICES AND/OR PAYMENTS      AGAINST EXISTING INVOICES"
1130 ? "12 - EDIT RECORDS IN TRANSACTION FILE"
1140 ? "13 - LIST TRANSACTION FILE"
```

```
1150 ? "14 - PRINT INVOICES"
1190 ? " 0 - EXIT"
1200 REM VECTOR
1205 TRAP 1100
1210 ? :? :? "SELECT AN OPTION ";:INPUT OPT
1220 IF OPT=ZERO THEN GOTO GOBACK
1230 IF OPT<11 OR OPT>14 OR OPT<>INT(OPT) THEN ? "?":GOTO 1100
1250 TRAP UNTRAP:? :? :? "   ...please wait..."
1255 GOSUB 8000:GOSUB 8200
1260 GOSUB READRIX:GOSUB READCIX:OPEN #3,IN+OUT,ZERO,CUFN$:OPEN #2,IN+OUT,ZERO,RFN$
1265 QI=CIX(ZERO):GOSUB CIGET:NUMCUST=CDAT(2):CUSTHIGH=CDAT(3)
1270 IF NUMCUST>CMAX THEN ? " ERROR: INCONSISTENT CUST FILE ":STOP
1280 KEY$=RIX$(ONE):GOSUB RIGET:STARTDATE=RDATE(ZERO):NUMREC=RAMT(ZERO)
1285 IF NUMREC>RMAX THEN ? " ERROR: INCONSISTENT RECFIL ":STOP
1295 IF OPT=12 THEN OPEN #PR,OUT,ZERO,"E:"
1298 ON OPT-10 GOTO 2000,4000,6000,7000
1299 STOP
1900 REM .... CLOSE FILES AND EXIT ... .
1905 ? :? :? "   ...please wait..."
1910 QI=CIX(ZERO):GOSUB CIGET:CDAT(2)=NUMCUST:CDAT(3)=CUSTHIGH:QI=CIX(ZERO):GOSUB CIPUT
1920 KEY$=RIX$(ONE):GOSUB RIGET:RAMT(ZERO)=NUMREC:GOSUB RIPUT
1950 CLOSE #2:CLOSE #3
1960 GOSUB WRITERIX:GOSUB WRITECIX
1990 RUN
2000 REM ....ADD INVOICES/PAYMENTS.... .
2005 IF NUMREC=RMAX THEN ? :? " ERROR:  TRANSACTION FILE FULL":STOP
2010 GRAPHICS ZERO:? "NEW INVOICES, PAYMENTS ON OLD INVOICES":? :?
2020 ? "You may now enter ...":? "- a customer number":? "- a '?' if you don't know the number"
2022 ? "- just  RETURN  to add a new customer - an 'E' to Exit"
2024 ? :? "Your entry ";:INPUT FMT$:IF LEN(FMT$)=0 THEN 3800:REM ADD NEW CUST
2026 IF FMT$(1,1)="E" THEN 1900
2028 IF FMT$(1,1)<>"?" THEN 2200
2030 ? :? :? "If you do not know the customer number  for this customer, this program will  search through ";
2035 ? "the customer file for  you, but this can be a lengthy"
2040 ? "  process.  Do you really want to do    the search ";:GOSUB YESNO:IF QYN=NO THEN 2000
2050 REM SERIAL SEARCH
2060 IF NUMCUST=0 THEN ? " SORRY:  EMPTY CUSTOMER FILE":GOTO 2020
2070 ? :? "What customer name ";:INPUT KEY$:KL=LEN(KEY$):IF KL=0 THEN 2000
2072 ? :? " SEARCHING "
2100 FOR CUSTIX=ONE TO NUMCUST:QI=CIX(CUSTIX):GOSUB CIGET
2105 IF CNAME$(ONE,KL)<>KEY$ THEN 2175
2110 GRAPHICS ZERO:GOSUB 8900:? :? :? "IS THIS CORRECT CUSTOMER ";:GOSUB YESNO:? :IF QYN=NO THEN 2175
2120 CURCUST=VAL(CNUM$):GOTO 225(
2175 NEXT CUSTIX
2180 ? :? " SORRY:  CUSTOMER NOT FOUND":? :FOR QQ=ONE TO 1000:NEXT QQ
2190 GOTO 2000
2200 REM GIVEN CUSTOMER NUMBER
2205 TRAP 2000:CURCUST=VAL(FMT$):IF CURCUST<1 OR CURCUST>999 OR CURCUST<>INT(CURCUST) THEN ? "?":GOTO 2000
2210 FOR CUSTIX=ZERO TO NUMCUST:IF INT(CIX(CUSTIX)/1E7)<>CURCUST THEN NEXT CUSTIX:GOTO 2180
2220 QI=CIX(CUSTIX):GOSUB CIGET
2230 GRAPHICS ZERO:GOSUB 8900:? :? :? "IS THIS CORRECT CUSTOMER ";:GOSUB YESNO:? :IF QYN=NO THEN 2180
2250 REM WHEN HERE, CUSTIX, CURCUST, AND CUST INFO ALL SET UP
2252 GRAPHICS ZERO:GOSUB 8900
```

```
2255 ? :? :? :? "You may enter a new invoice or a        payment against an exiSting invoice."
2260 ? "Is this a NEW invoice ";:GOSUB YESNO:DOINV=QYN:GRAPHICS ZERO
2265 ? "Customer number ";CNUM$:? CNAME$:?
2270 ? "Please enter the following:":?
2300 REM GET RECFIL INFO
2310 DOK=NO:GOSUB 8300
2315 NUMREC=NUMREC+ONE:QQ=14*NUMREC:KEY$=RIX$(QQ+ONE)
2320 KEY$(1,8)=RINV$:RCNUM$=CNUM$:KEY$(9,11)=CNUM$
2325 GOSUB RIPUT:RIX$(QQ+ONE,QQ+14)=KEY$
2390 GOTO 2000
2399 STOP
3800 REM ADD CUSTOMER
3810 CUSTIX=NUMCUST+ONE:CURCUST=CUSTHIGH+ONE:IF CUSTIX<=CMAX AND CURCUST<=999 THEN 3850
3820 ? :? :? " ERROR: CUSTOMER FILE IS FULL ":FOR QQ=ONE TO 1000:NEXT QQ:GOTO 2000
3850 GRAPHICS ZERO:? " New customer  ":? "Adding customer number ";CURCUST:? :GOSUB 8000:GOSUB 8800
3855 TEMP$=STR$(1000+CURCUST):CNUM$=TEMP$(2,4)
3860 QI=CIX(CUSTIX):QI=QI-IE7*INT(QI/IE7)+IE7*CURCUST:CIX(CUSTIX)=QI:GOSUB CIPUT
3880 NUMCUST=CUSTIX:CUSTHIGH=CURCUST
3890 GOTO 2250
4000 REM OPTION 12
4005 TRAP 4000
4010 GRAPHICS ZERO:? "EDIT TRANSACTION FILE RECORDS"
4020 GOSUB 8000:GOSUB 8200
4030 ? :? "You may find a record to be edited if  you know either the invoice number  or the customer number."
4040 ? "  [customer number 0 exits]":? :? "Do you know invoice # ";:GOSUB YESNO:IF QYN THEN 4100
4050 ? :? :? "What is the customer number ";:INPUT CURCUST:IF CURCUST=ZERO THEN 1900
4055 IF CURCUST<ONE OR CURCUST>999 OR CURCUST<>INT(CURCUST) THEN ? " BAD CUSTOMER NUMBER ":GOTO 4050
4060 TRAP UNTRAP:TEMP$=STR$(1000+CURCUST):KEY$=TEMP$(2,4)
4070 FOR RECIX=ZERO TO NUMREC:QQ=RECIX*14:IF RIX$(QQ+9,QQ+11)<>KEY$ THEN 4090
4075 ? "Found invoice # ";RIX$(QQ+1,QQ+8);", cust # ";RIX$(QQ+9,QQ+11)
4080 ? "   Is this correct invoice ";:GOSUB YESNO:IF QYN THEN 4200
4090 NEXT RECIX
4095 ? " ERROR  cannot find customer/invoice":FOR QT=ONE TO 250:NEXT QT:GOTO 4000
4100 ? :? :? "What is the invoice number ";:INPUT KEY$:QI=LEN(KEY$)
4110 FOR RECIX=ZERO TO NUMREC:QQ=RECIX*14:IF RIX$(QQ+ONE,QQ+QI)<>KEY$ THEN 4090
4120 GOTO 4075
4200 REM FOUND ONE TO EDIT
4210 KEY$=RIX$(QQ+ONE):GOSUB RIGET:GRAPHICS ZERO:GOSUB 8500
4215 ? :? "....................................."
4220 ? "Forward   Backwards   Change":? "DeleteExit":? :? "Select >> ";
4230 GET #ONE,OPT:IF OPT<66 OR OPT>70 THEN ? "?";:GOTO 4230
4240 ? CHR$(OPT);:ON OPT-65 GOTO 4250,4300,4350,4000,4450
4250 REM BACK
4260 RECIX=RECIX-ONE:QQ=RECIX*14:IF RECIX THEN 4200
4290 GOTO 4000
4299 STOP
4300 REM CHANGE
4310 GRAPHICS ZERO:GOSUB 8520:DOK=YES:? :? "Enter changes, RETURN for  no change:":? :GOSUB 8300
4319 TRAP UNTRAP
4320 QQ=RECIX*14:KEY$=RIX$(QQ+ONE):KEY$(ONE,8)=RINV$:RIX$(QQ+ONE,QQ+8)=RINV$:GOSUB RIPUT
4345 GOTO 4000
4350 REM DEL
4360 NUMREC=NUMREC-ONE:RIX$(QQ+ONE,14*(RMAX-ONE))=RIX$(QQ+15):GOTO 4000
```

```
4450 REM FORWARD
4460 RECIX=RECIX+ONE:QQ=14*RECIX:IF RECIX>NUMREC THEN 4000
4490 GOTO 4200
5999 STOP
6000 REM ....OPTION 13, LIST FILE..... .
6010 GRAPHICS ZERO:? "LIST TRANSACTION FILE":? :? :? :?
6015 IF NUMREC=ZERO THEN PRINT " ERROR:  NO RECORDS IN FILE":FOR QT=ONE TO 1000:NEXT QT:RUN
6020 GOSUB PRQUERY
6100 FOR RECIX=ONE TO NUMREC:KEY$=RIX$(RECIX*14+ONE):GOSUB RIGET
6110 IF PRFLAG THEN ? #PR:? #PR:? #PR;"-----------------------------------------":? #PR:? #PR
6120 GOSUB 8500
6180 IF PRFLAG=NO THEN ? :? "  hit any key to continue ";:GET #ONE,QT:GRAPHICS ZERO
6190 NEXT RECIX
6200 FOR QT=ONE TO 8:? #PR:NEXT QT
6290 RUN
                7000 REM .... PRINT INVOICES ....      .
7005 TRAP 7005
7010 GRAPHICS ZERO:? "You may print...":? :? "- all invoices in transaction file by  hitting just  RETURN "
7020 ? "- all invoices for a single customer    by entering a customer number"
7030 ? "- exit by entering 'END'":? :? "Your entry ";:INPUT TEMP$
7040 DOINV=LEN(TEMP$):IF DOINV=ZERO THEN 7100
7050 IF TEMP$(ONE,ONE)="E" THEN CLOSE #2:CLOSE #3:RUN
7060 QQ=VAL(TEMP$):TEMP$=STR$(1000+QQ):KEY$=TEMP$(2):IF QQ<ONE OR QQ>999 OR QQ<>INT(QQ) THEN 7000
7100 GOSUB PRQUERY
7150 FOR RECIX=ONE TO NUMREC:QQ=RECIX*14:IF DOINV AND RIX$(QQ+9,QQ+11)<>KEY$ THEN 7490
7155 KEY$=RIX$(QQ+ONE):GOSUB RIGET:IF ASC(RTERM$)=255 THEN 7490
7160 QI=CIX(ZERO):GOSUB CIGET:PRINT #PR,"I N V O I C E":PRINT #PR
7170 PRINT #PR;"from:"," ","Invoice ";RINV$:PRINT #PR;CNAME$:PRINT #PR;CADDR1$
7175 IF CADDR2$<>BLANK$(ONE,LEN(CADDR2$)) THEN ? #PR;CADDR2$
7180 PRINT #PR;CCITY$;"  ";CSTATE$;"  ";CDAT(ZERO):PRINT #PR:PRINT #PR;"to:"
7260 TEMP$=RCNUM$:CURCUST=VAL(TEMP$):GOSUB 8000
7270 FOR CUSTIX=ONE TO NUMCUST:IF INT(CIX(CUSTIX)/IE7)<>CURCUST THEN NEXT CUSTIX:? "??? NO CUST":STOP
7280 QI=CIX(CUSTIX):GOSUB CIGET
7290 PRINT #PR;CNAME$;"PO# ";RPO$:PRINT #PR;CADDR1$,"[";RCNUM$;"]"
7300 IF CADDR2$<>BLANK$(ONE,LEN(CADDR2$)) THEN ? #PR;CADDR2$
7305 PRINT #PR;CCITY$;"  ";CSTATE$;"  ";CDAT(ZERO):PRINT #PR:PRINT #PR
7310 PRINT #PR;"terms:"," ","   date:":QDATE=RDATE(ZERO):GOSUB PDATE:PRINT #PR;RTERM$;"   ";QD$
7320 PRINT #PR:PRINT #PR;"description:","        amount":PRINT #PR
7330 QN=RDAT(2):GOSUB PRETTY:PRINT #PR;RDESC$;FMT$
7340 QN=RDAT(4):GOSUB PRETTY:PRINT #PR;"sales tax  ",FMT$
7350 QN=RDAT(6):GOSUB PRETTY:PRINT #PR;"shipping   ",FMT$:PRINT #PR
7360 QN=RDAT(ZERO):GOSUB PRETTY:PRINT #PR;"xxx TOTAL xxx",FMT$
7470 IF PRFLAG THEN FOR QT=ZERO TO 6:PRINT #PR:NEXT QT:GOTO 7490
7480 ? "       hit any key to continue ";:GET #ONE,QT
7490 NEXT RECIX:GOTO 7000
8000 REM CLR CUSTFIL DATA FIELDS
8010 CNUM$=BLANK$:CNAME$=BLANK$:CADDR1$=BLANK$:CADDR2$=BLANK$:CCITY$=BLANK$:CSTATE$=BLANK$:CREM$=BLANK$
8030 CDAT(ZERO)=ZERO:CDAT(ONE)=ZERO:CDAT(2)=ZERO:CDAT(3)=ZERO
8090 RETURN
8200 REM CLR RECFIL DATA FIELDS
8210 RCNUM$=BLANK$:RINV$=BLANK$:RPO$=BLANK$:RDESC$=BLANK$:RTERM$=BLANK$
8220 RDATE(ZERO)=ZERO:RAMT(ZERO)=ZERO:FOR QT=0 TO 8:RDAT(QT)=ZERO:NEXT QT
8290 RETURN
```

```
8300 REM ....GET RECFIL INFO ..... .
8301 REM FLAGS: DOINV AND DOK
8305 TRAP 8305
8306 ACCTSALE=DEFACCTSALE:IF CDAT(3) THEN ACCTSALE=CDAT(3)
8307 ACCTAR=DEFACCTAR:IF CDAT(2   ) THEN ACCTAR=CDAT(2)
8310 FMT$="invoice number ":GOSUB 8880:IF QT THEN RINV$=TEMP$
8320 FMT$="customer p.o. #":GOSUB 8875:IF QT THEN RPO$=TEMP$
8325 FMT$="payment  date  ":IF DOINV THEN FMT$="invoice  date  "
8327 GOSUB 8880:IF QT THEN RDATE(ZERO)=VAL(TEMP$):QDATE=RDATE(ZERO):GOSUB PDATE:? "   ";QD$
8330 FMT$="remarks ":IF DOINV THEN FMT$="item description   "
8331 GOSUB 8875:IF QT THEN RDESC$=TEMP$
8335 IF DOINV=NO THEN RTERM$=CHR$(255):RTERM$(2)=BLANK$:GOTO 8400
8340 FMT$="item  amount  ":GOSUB 8880:IF QT THEN RDAT(2)=VAL(TEMP$)
8345 FMT$="CR":QN=ACCTSALE:QQ=3:GOSUB 8490
8350 FMT$="sales tax amt ":GOSUB 8880:IF QT THEN RDAT(4)=VAL(TEMP$)
8355 FMT$="CR":QN=ACCTTAX:QQ=5:GOSUB 8490
8360 FMT$="shipping  amt ":GOSUB 8880:IF QT THEN RDAT(6)=VAL(TEMP$)
8365 FMT$="CR":QN=ACCTSHIP:QQ=7:GOSUB 8490
8370 QN=RDAT(2)+RDAT(4)+RDAT(6):RAMT(ZERO)=QN:RDAT(ZERO)=QN:GOSUB PRETTY:? "TOTAL Invoice";FMT$
8375 FMT$="DR":QN=ACCTAR:QQ=ONE:GOSUB 8490
8380 FMT$="terms,etc. ":GOSUB 8875:IF QT THEN RTERM$=TEMP$
8395 RETURN
8400 FMT$="payment amt ":GOSUB 8880:IF QT THEN RDAT(ZERO)=VAL(TEMP$):RDAT(2)=RDAT(ZERO)
8410 RAMT(ZERO)=RDAT(ZERO):FMT$="DR":QN=ACCTPMT:QQ=ONE:GOSUB 8490
8420 FMT$="CR":QN=ACCTAR:QQ=3:GOSUB 8490
8450 RETURN
8489 REM   GET CR/DR ACCT NUMBER
8490 ? "";:QT=LEN(FMT$):FMT$(QT+ONE)=" acct # [    ]":FMT$(QT+11  ),QT+13)=STR$(QN):GOSUB 8880:IF QT=NO THEN RETURN
8492 IF TEMP$(ONE,ONE)="," THEN RDAT(QQ)=QN:RETURN
8494 TRAP 8496:RDAT(QQ)=VAL(TEMP$)
8496 TRAP 8305:RETURN
8500 REM  ... PRINT RECFIL INFO ...    .
8510 TEMP$=RCNUM$:CURCUST=VAL(TEMP$):GOSUB 8000:DOINV=YES
8515 FOR CUSTIX=ONE TO NUMCUST:IF INT(CIX(CUSTIX)/IE7)<>CURCUST THEN NEXT CUSTIX:? "??? NO CUST":STOP
8517 QI=CIX(CUSTIX):GOSUB CIGET
8519 REM CALL HERE IF CUST FILE SETUP
8520 ? #PR;"customer: number ";CNUM$:? #PR;"        : ";CNAME$
8525 QDATE=RDATE(ZERO):GOSUB PDATE:QN=RAMT(ZERO):GOSUB PRETTY
8530 ? #PR:? #PR;" invoice: number ";R:INV$:? #PR;"          : customer p.o.# ";RPO$:? #PR;"        : date ";QD$
8535 IF RTERM$(ONE,ONE)=CHR$(255) THEN DOINV=NO:GOTO 8600
8540 ? #PR;"        : total amt ";FMT$:? #PR;"terms: ";RTERM$:? #PR:? #PR;"item                amount  DR/CR acct"
8550 QN=RDAT(2):GOSUB PRETTY:? #PR;RDESC$(ONE,16);FMT$;" CR ";RDAT(3)
8560 QN=RDAT(4):GOSUB PRETTY:? #PR;"sales tax       ";FMT$;" CR ";RDAT(5)
8570 ? ;  ?(  (:! N: =RDAT(6):GOSUB PRETTY:? #PR;"shipping        ";FMT$;" CR ";RDAT(7)
8580 QN=RDAT(ZERO):GOSUB PRETTY:? #PR:? #PR;"accts receivable";FMT$;" DR ";RDAT(ONE)
8590 RETURN
8600 ? #PR:? #PR;"remarks: ";RDESC$
8610 ? #PR:? #PR;"payment amount:";FMT$:? #PR;"      DR acct # ";RDAT(ONE):? #PR;"      CR acct # ";RDAT(3):RETURN
8800 REM .ASK FOR NEW CUSTFILE INFO.   .
8805 DOK=NO
8810 FMT$="name":GOSUB 8880:IF QT THEN CNAME$=TEMP$
8812 FMT$="addr line 1":GOSUB 8880:IF QT THEN CADDR1$=TEMP$
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```
8814 FMT$="addr line 2":GOSUB 8875:IF QT THEN CADDR2$=TEMP$
8816 FMT$="city":GOSUB 8880:IF QT THEN CCITY$=TEMP$
8818 FMT$="state abbreviation":GOSUB 8880:IF QT THEN CSTATE$=TEMP$
8820 FMT$="zip code (5 or 9 digit)":GOSUB 8880:IF QT THEN CDAT(ZERO)=VAL(TEMP$)
8822 QN=ZERO:FMT$="area code of phone number":GOSUB 8875:IF QT THEN QN=VAL(TEMP$)
8824 FMT$="phone number (7 digits)":GOSUB 8875:IF QT THEN CDAT(ONE)=QN*IE7+VAL(TEMP$)
8826 FMT$="default DR ledger account":GOSUB 8875:IF QT THEN CDAT(2)=VAL(TEMP$)
8828 FMT$="default CR ledger account":GOSUB 8875:IF QT THEN CDAT(3)=VAL(TEMP$)
8830 FMT$="remarks":GOSUB 8875:IF QT THEN CREM$=TEMP$
8840 RETURN
8875 QQ=DOK:DOK=YES:GOSUB 8880:DOK=QQ:RETURN
8880 ? FMT$;" ";:INPUT TEMP$:QT=LEN(TEMP$):IF QT THEN CHANGE=YES:TEMP$(LEN(TEMP$)+1)=BLANK$:RETURN
8882 IF DOK THEN TEMP$=BLANK$:RETURN
8884 ? "?";:GOTO 8880
8900 REM ...PRINT INFO ABOUT CUST..... .
8905 ? "Customer number ";CNUM$:?
8910 ? "   name: ";CNAME$:? "address: ";CADDR1$:? "         ";CADDR2$
8912 ? "         ";CCITY$;" ";CSTATE$;" ";CDAT(ZERO)
8914 QT=CDAT(ONE):QN=INT(QT/IE7):TEMP$=STR$(QT-IE7*QN+IE7)
8916 ? "  phone: (";QN;") ";TEMP$(2,4);"-";TEMP$(5,8)
8918 ? "default DR acct # ";CDAT(2);"   CR acct # ";CDAT(3)
8920 ? "remarks: ";CREM$
8990 RETURN
```

```
10 REM -- MICROREC --
20 REM ACCOUNTS RECEIVABLE PROGRAM       FROM COMPUMAX ASSOCIATES, INC.
30 REM 467 HAMILTON AVE.
40 REM PALO ALTO, CA 94301
50 REM COPYRIGHT (C) 1980, COMPUMAX
60 REM
70 REM UNDER PROTECTION OF CALIFORNIA TRADE SECRET LAW.  DO NOT COPY, RENAME, CHANGE, CONVERT, OR EXPAND
80 REM FOR RESALE WITHOUT WRITTEN AGREEMENT WITH COMPUMAX.
90 REM ------------------------------
100 REM RCOMMON -- CODE COMMON TO ALL      MICROREC MODULES
105 REM
110 REM SUBROUTINE ADDRESSES
120 IGET=505:BGET=510:IPUT=515:BPUT=520
125 JIGET=530:JIPUT=540:CIGET=550:CIPUT=560:RIGET=570:RIPUT=580
150 PDATE=800:PRETTY=825:PRQUERY=860:YESNO=850:GOBACK=875
160 LET READCIX=900:WRITECIX=910:LET  IREADJIX=920:WRITEJIX=930:LET READRIX=940:WRITERIX=950
200 REM DIMENSION, ETC.
210 DIM QD$(9),FMT$(40),F2$(15),BLANK$(40):BLANK$=" ":BLANK$(40)=" ":BLANK$(2,39)=BLANK$
220 DIM MONTH$(40):MONTH$="??JANFEBMARAPRMAYJUNJULAUGSEPOCTNOVDEC"
290 C100=100:IE7=10000000:ZERO=0:LET ONE=1:UNTRAP=40000:YES=ONE:NO=ZERO
292 PR=5:IN=4:OUT=8
350 REM FILE NAMES, DATA FILES ONLY
351 REM NAMES OF INDEX FILES ARE
352 REM IN LINES 900-999
360 DIM CUFN$(15):CUFN$="D2:CUSTFILE.DAT"
370 DIM JFN$(15):JFN$="D2:JOUREC.DAT"
380 DIM RFN$(15):RFN$="D2:RECFIL.DAT"
390 DIM RMFN$(15):RMFN$="D2:RECMAST.DAT"
400 REM ===== RECORD LAYOUTS ========= .
409 REM ......JOURNAL FILE ........... .
410 DIM JACCT$(3),JDESC$(30),JDATE(ZERO),JAMT(ZERO),JDATE2(ZERO):JLEN=45
415 JMAX=200:JADR=ADR(JACCT$)
419 REM .....CUSTOMER FILE ........... .
420 DIM CNUM$(3),CNAME$(25),CADDR1$(25),CADDR2$(15),CCITY$(15),CSTATE$(2),CREM$(16),CDAT(4):CULEN=125
425 CMAX=200:CADR=ADR(CNUM$)
429 REM .....RECFILE AND RECMAST.....      . .
430 DIM RCNUM$(3),RINV$(8),RPO$(8),RDATE(ZERO),RDESC$(20),RTERM$(20),RAMT(ZERO),RDAT(9):RLEN=125
435 RMAX=50:LET RADR=ADR(RCNUM$):REM FOR RECFIL
440 MRMAX=300:REM FOR RECMAST
480 IF PEEK(1664)<>160 THEN GOTO GOBACK
499 OPEN #ONE,4,ZERO,"K:":GOTO 1000
500 REM ... GET AND PUT ROUTINES ..... .
505 QI=QI-IE7*INT(QI/IE7):QT=INT(QI/1000):QI=QI-1000*QT:POINT #QF,QT,QI
510 QT=USR(1664,QF,QA,QL):IF QT=ONE OR QT=3 THEN RETURN
511 PRINT " BAD BGET...STATUS ";QT:STOP
515 QI=QI-IE7*INT(QI/IE7):QT=INT(QI/1000):QI=QI-1000*QT:POINT #QF,QT,QI
520 QT=USR(1668,QF,QA,QL):IF QT=ONE OR QT=3 THEN RETURN
521 PRINT " BAD BPUT...STATUS ";QT:STOP
530 QA=JADR:QL=JLEN:QF=4:GOTO IGET
540 QA=JADR:QL=JLEN:QF=4:GOTO IPUT
550 QA=CADR:QL=CULEN:QF=3:GOTO IGET
560 QA=CADR:QL=CULEN:QF=3:GOTO IPUT
570 QA=RADR:QL=RLEN:QF=2:QS=ASC(KEY$(12))*256+ASC(KEY$(13)):QT=ASC(KEY$(14)):POINT #QF,QS,QT:GOTO BGET
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580 QA=RADR:QL=RLEN:QF=2:QS=ASC(KEY$(12))*256+ASC(KEY$(13)):QT=ASC(KEY$(14)):POINT #QF,QS,QT:GOTO BPUT
799 REM .....MISCELLANEOUS ROUTINES... .
800 REM Print DATE
805 QM=INT(QDATE/10000):QT=QDATE-QM*10000:QD=INT(QT/C100):QY=QT-QD*C100:IF QM<1 OR QM>12 THEN QD$="???":GOTO 810
807 QT=10000*QY+100 *QM+QD:QD$=MONTH$(QM*3 ,QM*3+2)
810 QD$(4)=STR$(QD+C100):QD$(4,4)=" "
82  ( QD$(7)=STR$(C100+QY):QD$(7,7)=",":RETURN
825 REM PRETTY formatted print
827 IF ABS(QN)>=1000000000 THEN FMT$=STR$(QN):RETURN!
829 QT=INT(ABS(QN)* C100+0.5):F2$=" $":IF QN<:0 THE:N F2$="($"
831 F2$(3)=STR$(INT(QT/C100)):F2$(LEN(F2$)+ONE)=",":QT=QT-C100*INT(QT/C100)
833 FMT$=STR$(C100+QT):F2$(LEN(F2$)+ONE: )=FMT$(2,3):FMT$=BLANK$:FMT$(15-LEN(F2$))=F2$
835 IF QN<ZERO THEN FMT$(15)=")"
837 RETURN
850 REM YESNO
853 ? "(Y OR N)? ";
855 GET #ONE,QYN:IF QYN=89 OR QYN=121 THEN ? "Y";:QYN=YES:RETURN
857 IF QYN=78 OR QYN=110 THEN ?  "N";:QYN=NO:RETURN
859 ? CHR$(253);:GOTO 855
860 REM ASK FOR AND OPEN PRINT FILE
861 CLOSE #PR
862 PRFLAG=NO:FMT$="E:":? :? "OUTPUT TO GO TO PRINTER ";:GOSUB YESNO:? :IF QYN THEN FMT$="P:":PRFLAG=YES
864 OPEN #PR,8,ZERO,FMT$:RETURN
875 REM BACK TO MAMA
877 GRAPHICS 2:PRINT #6:PRINT #6:PRINT #6;"     MICROREC":PRINT #6:PRINT #6:PRINT #6;"        by"
879 PRINT #6;"  C O M P U M A X":? :? :? :? "    ...please wait...":TRAP 881:RUN "D1:MICROREC"
881 ? :? "Put disk with 'MICROREC' in D1,please":? :? "Have you done so ";:GOSUB YESNO:? :IF QYN THEN GOTO GOBACK
883 GOTO 881
900 QF=7:OPEN #QF,IN,ZERO,"D2:CUSTFILE.NDX":DIM CIX$(1),CIX(CMAX):QA=ADR(CIX$)+ONE:QL=6*(CMAX+ONE)
902 GOSUB BGET:CLOSE #QF:RETURN
910 QF=7:OPEN #QF,IN+OUT,ZERO,"D2:CUSTFILE.NDX":QA=ADR(CIX$)+ONE:QL=6*(CMAX+ONE):GOSUB BPUT:CLOSE #QF:RETURN
920 QF=7:OPEN #QF,IN,ZERO,"D2:JOUREC.NDX":QA=JADR+33:QL=6:GOSUB BGET
922 QT=INT(JDATE(ZERO)/IE7):IF QT=ZERO THEN QT=JMAX
923 DIM JIX$(ONE),JIX(QT+ONE):JIX(ZERO)=JDATE(ZERO)
924 QA=ADR(JIX$)+7:QL=6*QT:GOSUB BGET:CLOSE #QF:RETURN
930 QF=7:OPEN #QF,IN+OUT,ZERO,"D2:JOUREC.NDX":QA=ADR(JIX$)+ONE:QL=6*(JMAX+ONE):GOSUB BPUT:CLOSE #QF:RETURN
940 QF=7:OPEN #QF,IN,ZERO,"D2:RECFIL.NDX":QL=14*(RMAX+ONE):DIM RIX$(QL):QA=ADR(RIX$)
942 RIX$(QL)="?":GOSUB BGET:CLOSE #QF:RETURN
950 QF=7:OPEN #QF,IN+OUT,ZERO,"D2:RECFIL.NDX":QA=ADR(RIX$):QL=14*(RMAX+ONE):GOSUB BPUT:CLOSE #QF:RETURN
1000 REM xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
1001 REM x
1002 REM x REC2 -- MASTER FILE
1003 REM x         EDIT/LIST/ETC.
1004  REM x
1005 REM xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx  .
1030 DIM TEMP$(40),KEY$(14)
1040 LET READRIX=1320:WRITERIX=1310:REM REDEFINE FOR RECMAST!!
1050 RMAX=MRMAX:REM BECUZ WE SWIPED FROM REC1
1060 DIM ILOW$(8),IHIGH$(8)
1100 REM MENU
1110 GRAPHICS ZERO:? "MICROREC 2 -- THE MASTER FILE":? :?
1120 ? "21 - EDIT RECORDS IN MASTER FILE"
1130 ? "22 - LIST MASTER FILE"
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1140 ? "23 - PRINT STATEMENTS"
1190 ? " 0 - EXIT"
1200 REM VECTOR
1205 TRAP 1100
1210 ? :? :? "SELECT AN OPTION ";:INPUT OPT
1220 IF OPT=ZERO THEN GOTO GOBACK
1230 IF OPT<21 OR OPT>23 OR OPT<>INT(OPT) THEN ? "?":GOTO 1100
1250 TRAP UNTRAP:? :? :? "   ...please wait..."
1255 GOSUB 8000:GOSUB 8200
1260 GOSUB READRIX:GOSUB READCIX:OPEN #3,IN+OUT,ZERO,CUFN$:OPEN #2,IN+OUT,ZERO,RMFN$
1265 QI=CIX(ZERO):GOSUB CIGET:NUMCUST=CDAT(2):CUSTHIGH=CDAT(3)
1270 IF NUMCUST>CMAX THEN ? " ERROR: INCONSISTENT CUST FILE ":STOP
1280 KEY$=RIX$(ONE):GOSUB RIGET:STARTDATE=RDATE(ZERO):NUMREC=RAMT(ZERO)
1285 IF NUMREC>RMAX THEN ? " ERROR: INCONSISTENT RECFIL ":STOP
1298 ON OPT-20 GOTO 4000,6000,7000
1299 STOP
1310 QF=7:OPEN #QF,OUT,ZERO,"D2:RECMAST.NDX":QA=ADR(RIX$):QL=14*(RMAX+ONE):GOSUB BPUT:CLOSE #QF:RETURN
1320 QF=7:OPEN #QF,IN,ZERO,"D2:RECMAST.NDX":QL=14*(RMAX+ONE):DIM RIX$(QL):QA=ADR(RIX$)
1322 RIX$(QL)="?":GOSUB BGET:CLOSE #QF:RETURN
1900 REM .... CLOSE FILES AND EXIT ... .
1905 ? :? :? "   ...please wait..."
1920 KEY$=RIX$(ONE):GOSUB RIGET:RAMT(ZERO)=NUMREC:GOSUB RIPUT
1950 CLOSE #2:CLOSE #3
1960 GOSUB WRITERIX
1990 RUN
4000 REM ....OPTION 21, EDIT..... .
4002 TRAP 4005:CLOSE #PR:OPEN #PR,8,ZERO,"E:"
4005 TRAP 4005
4010 GRAPHICS ZERO:? "EDIT MASTER FILE RECORDS"
4020 GOSUB 8000:GOSUB 8200
4030 ? :? "You may find a record to be edited if   you know either the invoice number    or the customer number."
4040 ? "  [customer number 0 exits]":? :? "Do you know invoice # ";:GOSUB YESNO:IF QYN THEN 4100
4050 ? :? :? "What is the customer number ";:INPUT CURCUST:IF CURCUST=ZERO THEN 1900
4055 IF CURCUST<ONE OR CURCUST>999 OR CURCUST<>INT(CURCUST) THEN ? " BAD CUSTOMER NUMBER ":GOTO 4050
4060 TRAP UNTRAP:TEMP$=STR$(1000+CURCUST):KEY$=TEMP$(2,4)
4070 FOR RECIX=ZERO TO NUMREC:QQ=RECIX*14:IF RIX$(QQ+9,QQ+11)<>KEY$ THEN 4090
4075 ? "Found invoice # ";RIX$(QQ+1,QQ+8);", cust # ";RIX$(QQ+9,QQ+11)
4080 ? "   Is this correct invoice ";:GOSUB YESNO:IF QYN THEN 4200
4090 NEXT RECIX
4095 ? " ERROR  cannot find customer/invoice":FOR QT=ONE TO 250:NEXT QT:GOTO 4000
4100 ? :? :? "What is the invoice number ";:INPUT KEY$:QI=LEN(KEY$)
4110 FOR RECIX=ZERO TO NUMREC:QQ=RECIX*14:IF RIX$(QQ+ONE,QQ+QI)<>KEY$ THEN 4090
4120 GOTO 4075
4200 REM FOUND ONE TO EDIT
          4210 KEY$=RIX$(QQ+ONE):GOSUB RIGET:GRAPHICS ZERO:GOSUB 8500
4215 ? :? "....................................."
4220 ? "Forward   Backwards   Change":? "DeleteExit":? :? "Select >> ";
4230 GET #ONE,OPT:IF OPT<66 OR OPT>70 THEN ? "?";:GOTO 4230
4240 ? CHR$(OPT);:ON OPT-65 GOTO 4250,4300,4350,4000,4450
4250 REM BACK
4260 RECIX=RECIX-ONE:QQ=RECIX*14:IF RECIX THEN 4200
          4270 GOTO 4000
```

```
4299 STOP
4300 REM CHANGE
4310 GRAPHICS ZERO:GOSUB 8520:DOK=YES:? :? "Enter changes, RETURN for no change:":? :GOSUB 8300
4319 TRAP UNTRAP
4320 QQ=RECIX*14:KEY$=RIX$(QQ+ONE):KEY$(ONE,8)=RINV$:RI     <                                   :(QQ+ONE,QQ+8)=RINV$:GOSUB RIPU
4345 GOTO 4200
4350 REM DEL
4360 NUMREC=NUMREC-ONE:RIX$(QQ+ONE,14*(RMAX-ONE))=RIX$(QQ+15):GOTO 4000
4450 REM FORWARD
4460 RECIX=RECIX+ONE:QQ=14*RECIX:IF RECIX>NUMREC THEN 4000
4490 GOTO 4200
5999 STOP
6000 REM .....OPTION 22, LIST FILE.... .
6005 TRAP 6005
6006 IF NUMREC=ZERO THEN ? " SORRY:  NO RECORDS IN 'RECMAST'":FOR QT=ZERO TO 100RECORDS IN 'RECMAST'":FOR QT=ZERO TO 1000:NEXT QT:RU
N
6010 GRAPHICS ZERO:PRINT "LIST MICROREC MASTER RECEIVABLES FILE":? :?
6018 CRANGE=NO:IRANGE=NO:DLOW=NO
6020 ? "DO YOU WISH TO LIST ONLY A GROUP OF     ONE OR MORE CUSTOMERS ";:GOSUB YESNO:IF QYN=NO THEN 6050
6030 ? :? :? "Range of customer numbers, specify:     LOWEST  ";:INPUT CLOW
     é          .040 ? "  HIGHEST ";:INPUT CHIGH:IF CLOW<ONE OR CHIGH>999 OR CLOW>CHIGH THEN ? " BAD CUST. NUMBER ":GOTO 6030
6045 CRANGE=YES
6050 ? :? 'DO YOU WISH TO LIST ONLY A GROUP OF     ONE OR MORE INVOICES ";:GOSUB YESNO:IF QYN=NO THEN 6070
6053 ? :? :? "Range of invoices, specify:'':?  '' LOWEST  ";:INPUT TEMP$:TEMP$(LEN(TEMP$)+ONE)=BLANK$:ILOW$=TEMP$
6056 ? "  HIGHEST ";:INPUT TEMP$:TEMP$(LEN(TEMP$)+ONE)=BLANK$:IHIGH$=TEMP$
6060 IF ILOW$>IHIGH$ THEN ? " BAD INVOICE DESIGNATORS ":GOTO 6060
6065 IRANGE=YES
6070 ? :? "DO YOU WISH TO LIST ONLY A GROUP OF     INVOICES ENTERED BETWEEN TWO GIVEN    DATES ";
6075 GOSUB YESNO:IF QYN=NO THEN 6100
6080 ? :? :? "Range of dates, specify:":? "  EARLIEST ";:INPUT QDATE:GOSUB PDATE:DLOW=QT:? "     ";QD$
6085 ? "    LATEST ";:INPUT QDATE:GOSUB PDATE:DHIGH=QT:? "     ";QD$
6100 ? :GOSUB PRQUERY:REM HI AND LOW ALREADY SET UP
6120 TRAP UNTRAP:LASTCUST=ZERO
6130 GOSUB 8000:GOSUB 8200
6150 FOR CURREC=ONE TO NUMREC:QI=CURREC*14+ONE:KEY$=RIX$(QI):TEMP$=KEY$(9,11):QN=VAL(TEMP$)
     6160 IF CRANGE AND (QN<CLOW OR QN>CHIGH) THEN 6890
6170 TEMP$=KEY$(ONE,8):IF IRANGE AND (TEMP$<ILOW$ OR TEMP$>IHIGH$) THEN 6890
6180 GOSUB RIGET:REM !!! FOUND ONE TO LIST !!!
6185 IF DLOW=ZERO THEN 6195
6190 QDATE=RDATE(ZERO):GOSUB PDATE:IF QT<DLOW OR QT>DHIGH THEN 6890
6195 IF LASTCUST=QN THEN GOSUB 8520:GOTO 6205
6200  LASTCUST=QN:GOSUB 8500:REM NEED NEW CUST INFO
6205 IF PRFLAG THEN 6300
6210 POSITION 2,22:? " hit any key to continue ";:GET #ONE,QT
6220 GRAPHICS ZERO
6290 GOTO 6890
6300 REM PRINTER:      C..PUT
6310 ? #PR:? #PR:?  #PR;".....                                                    .....":? #PR
6890 NEXT CURREC
6895 FOR QT=ONE TO 8:? #PR:NEXT QT
6900 GRAPHICS ZERO:? :? :? "Do you wish to do another Master File  listing now ";:GOSUB YESNO:IF QYN THEN 6000
6950 CLOSE #2:CLOSE #3:RUN
7000 REM ..OPTION 23, PRINT STATEMENTS .
```

```
7005 TRAP 7005
7006 IF NUMREC=ZERO THEN ? " SORRY!  NO RECORDS IN 'RECMAST'":FOR QT=ZERO TO 1000:NEXT QT:RUN
7010 GRAPHICS ZERO:PRINT "PRINT CUSTOMER STATEMENTS":? :?
7018 CRANGE=NO
7020 ? "Do you wish to PRINT STATEMENTS for     only a group of one or more          customers ";
7025 GOSUB YESNO:IF QYN=NO THEN 7050
7030 ? :? :? "Range of customer numbers, specify:     LOWEST  ";:INPUT CLOW
7040 ? "  HIGHEST ";:INPUT CHIGH:IF CLOW<ONE OR CHIGH>999 OR CLOW>CHIGH THEN ? " BAD CUST. NUMBER ":GOTO 7030
7045 CRANGE=YES
7050 GOSUB 8000:GOSUB 8200
7060 ? :? :GOSUB PRQUERY
7090 TRAP UNTRAP
7100 FOR CUSTIX=ONE TO NUMCUST:CURCUST=INT(CIX(CUSTIX)/1E7)
7110 IF CRANGE AND (CURCUST<CLOW OR CURCUST>CHIGH) THEN 7550
7120 BALANCE=ZERO:HEADERFLAG=NO
7150 FOR RECIX=ONE TO NUMREC:QQ=RECIX*14+ONE:KEY$=RIX$(QQ):TEMP$=KEY$(9,11):IF VAL(TEMP$)<>CURCUST THEN 7490
7155 GOSUB RIGET:IF HEADERFLAG THEN 7350
7157 IF PRFLAG THEN PRINT #PR;".....":PRINT #PR
7160 QI=CIX(ZERO):GOSUB CIGET:PRINT #PR,"S T A T E M E N T":PRINT #PR:PRINT #PR
7170 PRINT #PR;"from:":PRINT #PR;CNAME$:PRINT #PR;CADDR1$
7175 IF CADDR2$<>BLANK$(ONE,LEN(CADDR2$)) THEN PRINT #PR;CADDR2$
7180 PRINT #PR;CCITY$;"  ";CSTATE$;"  ";CDAT(ZERO):PRINT #PR:PRINT #PR;"to:"
7280 QI=CIX(CUSTIX):GOSUB CIGET
7290 PRINT #PR;CNAME$,"[";CNUM$;"]":PRINT #PR;CADDR1$
7295 IF CADDR2$<>BLANK$(ONE,LEN(CADDR2$)) THEN PRINT #PR;CADDR2$
7300 PRINT #PR;CCITY$;"  ";CSTATE$;"  ";CDAT(ZERO):PRINT #PR:PRINT #PR
7310 PRINT #PR;"Invoice#  Description":PRINT #PR;"   Date       PO#/note        Amount":PRINT #PR
7320 HEADERFLAG=YES
7350 REM PRINT DETAIL
7360 QDATE=RDATE(ZERO):GOSUB PDATE:QN=RAMT(ZERO):BALANCE=BALANCE+QN:GOSUB PRETTY
7370 PRINT #PR;RINV$;"  ";RDESC$
7375 IF RPO$=BLANK$(ONE,LEN(RPO$)) THEN RPO$="invoiced"
7380 PRINT #PR;"   ";QD$;" ";RPO$;" ";FMT$
7400 FOR QQ=ZERO TO 7 STEP 2:IF RDAT(QQ)=ZERO THEN 7450
7410 QN=RDAT(QQ):BALANCE=BALANCE-QN:GOSUB PRETTY:QDATE=RDAT(QQ+ONE):GOSUB PDATE
7420 PRINT #PR;"   ";QD$;" payment  ";FMT$
7450 NEXT QQ
7490 NEXT RECIX
7500 IF HEADERFLAG=NO THEN 7550
7510 QN=BALANCE:GOSUB PRETTY:PRINT #PR:PRINT #PR
7520 PRINT #PR;"        xxxBALANCExxx ";FMT$
7530 IF BALANCE=ZERO THEN PRINT #PR;"  No payment is necessary, Thank you.":GOTO 7540
7532 IF BALANCE>ZERO THEN PRINT #PR;"  Please pay this balance, Thank you.":GOTO 7540
7535 PRINT #PR;"   CREDIT BALANCE...do NOT pay this."
7540 IF PRFLAG THEN FOR QT=ZERO TO 6:PRINT #PR:NEXT QT:GOTO 7550
7545 ? "       hit any key to continue ";:GET #ONE,QT
7550 REM
7560 NEXT CUSTIX
7570 GRAPHICS ZERO:POSITION 2,10:? "Do you want to print more customer      statements ";
7580 GOSUB YESNO:IF QYN THEN 7000
7590 RUN
8000 REM ...CLR CUSTFIL DATA FIELDS... .
8010 CNUM$=BLANK$:CNAME$=BLANK$:CADDR1$=BLANK$:CADDR2$=BLANK$:CCITY$=BLANK$:CSTATE$=BLANK$:CREM$=BLANK$
8030 CDAT(ZERO)=ZERO:CDAT(ONE)=ZERO:CDAT(2)=ZERO:CDAT(3)=ZERO
```

```
8090 RETURN
8200 REM ...CLR RECFIL DATA FIELDS...
8210 RCNUM$=BLANK$:RINV$=BLANK$:RPO$=BLANK$:RDESC$=BLANK$:RTERM$=BLANK$
8220 RDATE(ZERO)=ZERO:RAMT(ZERO)=ZERO:FOR QT=0 TO 8:RDAT(QT)=ZERO:NEXT QT
8290 RETURN
8300 REM ....GET RECMAST INFO..... .
8305 TRAP 8305
8310 FMT$="invoice number ":GOSUB 8880:IF QT THEN RINV$=TEMP$
8320 FMT$="customer p.o. #":GOSUB 8875:IF QT THEN RPO$=TEMP$
8325 FMT$="invoice  date  "
8327 GOSUB 8880:IF QT THEN RDATE(ZERO)=VAL(TEMP$):QDATE=RDATE(ZERO):GOSUB PDATE:? "   ";QD$
8330 FMT$="item description   "
       3331 GOSUB 8875:IF QT THEN RDESC$=TEMP$
8340 FMT$="total amount  ":GOSUB 8880:IF QT THEN RAMT(ZERO)=VAL(TEMP$)
8350 FMT$="terms,etc. ":GOSUB 8875:IF QT THEN RTERM$=TEMP$
8360 FOR QL=ZERO TO 7 STEP 2:? "Payment # ";QL/2+ONE;:FMT$="; date   ":GOSUB 8875
8365 IF QT THEN QDATE=VAL(TEMP$):RDAT(QL+ONE)=QDATE:GOSUB PDATE:? "";QD$
8370 FMT$="      ; amount ":GOSUB 88[illegible]  ;:IF QT THEN RDAT(QL)=VAL(TEMP$)
8395 NEXT QL:RETURN
8500 REM  ... PRINT RECMAST INFO ...    .
8510 TEMP$=RCNUM$:CURCUST=VAL(TEMP$):GOSUB 8000:DOINV=YES
8515 FOR CUSTIX=ONE TO NUMCUST:IF INT(CIX(CUSTIX)/IE7)<>CURCUST THEN NEXT CUSTIX:? "??? NO CUST":STOP
    :3517 QI=CIX(CUSTIX):GOSUB CIGET
8519 REM CALL HERE IF CUST FILE SETUP
8520 ? #PR;"customer: number ";CNUM$:? #PR;"        : ";CNAME$
8525 QDATE=RDATE(ZERO):GOSUB PDATE:QN=RAMT(ZERO):GOSUB PRETTY
8530 ? #PR:? #PR;" invoice: number ";RINV$:? #PR;"        : customer p.o.# ";RPO$:? #PR;"        : date ";QD$
8535 ? #PR;"terms: ";RTERM$:? #PR
8540 ? #PR;"description:","           amount":? #PR;RDESC$;"   ";FMT$:? #PR
8550 QL=NO:FOR QQ=ZERO TO 7 STEP 2:QN=RDAT(QQ):QD=RDAT(QQ+ONE):IF   QN=0 THEN 8580
8560 QL=YES:GOSUB PRETTY:GOSUB PDATE:? #PR;QD$;" Payment # ";QQ/2+ONE;"  ";FMT$
8580 NEXT QQ:IF QL THEN RETURN
8590 ? #PR;"---No Payments Received Yet---":? #PR:RETURN
8874 REM ....ENTRY SUBROUTINES....
8875 QQ=DOK:DOK=YES:GOSUB 8880:DOK=QQ:RETURN
8880 ? FMT$;" ";:INPUT TEMP$:QT=LEN(TEMP$):IF QT THEN CHANGE=YES:TEMP$(LEN(TEMP$)+1)=BLANK$:RETURN
8882 IF DOK THEN TEMP$=BLANK$:RETURN
8884 ? "?";:GOTO 8880
```

```
10 REM -- MICROREC --
20 REM ACCOUNTS RECEIVABLE PROGRAM       FROM COMPUMAX ASSOCIATES, INC.
30 REM 467 HAMILTON AVE.
40 REM PALO ALTO, CA 94301
50 REM COPYRIGHT (C) 1980, COMPUMAX
60 REM
70 REM UNDER PROTECTION OF CALIFORNIA TRADE SECRET LAW.  DO NOT COPY, RENAME, CHANGE, CONVERT, OR EXPAND
80 REM FOR RESALE WITHOUT WRITTEN AGREEMENT WITH COMPUMAX.
90 REM ----------
100 REM RCOMMON -- CODE COMMON TO ALL      MICROREC MODULES
105 REM
110 REM SUBROUTINE ADDRESSES
120 IGET=505:BGET=510:IPUT=515:BPUT=520
125 JIGET=530:JIPUT=540:CIGET=550:CIPUT=560:RIGET=570:RIPUT=580
150 PDATE=800:PRETTY=825:PRQUERY=860:YESNO=850:GOBACK=875
160 LET READCIX=900:WRITECIX=910:LET READJIX=920:WRITEJIX=930:LET READRIX=940:WRITERIX=950
200 REM DIMENSION, ETC.
210 DIM QD$(9),FMT$(40),F2$(15),BLANK$(40):BLANK$=" ":BLANK$(40)=" ":BLANK$(2,39)=BLANK$
220 DIM MONTH$(40):MONTH$="??JANFEBMARAPRMAYJUNJULAUGSEPOCTNOVDEC"
290 C100=100:IE7=10000000:ZERO=0:LET ONE=1:UNTRAP=40000:YES=ONE:NO=ZERO
292 PR=5:IN=4:OUT=8
350 REM FILE NAMES, DATA FILES ONLY
351 REM NAMES OF INDEX FILES ARE
352 REM IN LINES 900-999
360 DIM CUFN$(15):CUFN$="D2:CUSTFILE.DAT"
370 DIM JFN$(15):JFN$="D2:JOUREC.DAT"
380 DIM RFN$(15):RFN$="D2:RECFIL.DAT"
390 DIM RMFN$(15):RMFN$="D2:RECMAST.DAT"
400 REM ===== RECORD LAYOUTS ========= .
409 REM .....JOURNAL FILE ..... .
410 DIM JACCT$(3),JDESC$(30),JDATE(ZERO),JAMT(ZERO),JDATE2(ZERO):JLEN=45
415 JMAX=200:JADR=ADR(JACCT$)
419 REM .....CUSTOMER FILE ..... .
420 DIM CNUM$(3),CNAME$(25),CADDR1$(25),CADDR2$(15),CCITY$(15),CSTATE$(2),CREM$(16),CDAT(4):CULEN=125
425 CMAX=200:CADR=ADR(CNUM$)
429 REM .....RECFILE AND RECMAST..... .
430 DIM RCNUM$(3),RINV$(8),RPO$(8),RDATE(ZERO),RDESC$(20),RTERM$(20),RAMT(ZERO),RDAT(9):RLEN=125
435 RMAX=50:LET RADR=ADR(RCNUM$):REM FOR RECFIL
440 MRMAX=300:REM FOR RECMAST
480 IF PEEK(1664)<>160 THEN GOTO GOBACK
499 OPEN #ONE,4,ZERO,"K:":GOTO 1000
500 REM ... GET AND PUT ROUTINES ..... .
505 QI=QI-IE7*INT(QI/IE7):QT=INT(QI/1000):QI=QI-1000*QT:POINT #QF,QT,QI
510 QT=USR(1664,QF,QA,QL):IF QT=ONE OR QT=3 THEN RETURN
511 PRINT " BAD BGET...STATUS ";QT:STOP
515 QI=QI-IE7*INT(QI/IE7):QT=INT(QI/1000):QI=QI-1000*QT:POINT #QF,QT,QI
520 QT=USR(1668,QF,QA,QL):IF QT=ONE OR QT=3 THEN RETURN
521 PRINT " BAD BPUT...STATUS ";QT:STOP
530 QA=JADR:QL=JLEN:QF=4:GOTO IGET
540 QA=JADR:QL=JLEN:QF=4:GOTO IPUT
550 QA=CADR:QL=CULEN:QF=3:GOTO IGET
560 QA=CADR:QL=CULEN:QF=3:GOTO IPUT
570 QA=RADR:QL=RLEN:QF=2:QS=ASC(KEY$(12))*256+ASC(KEY$(13)):QT=ASC(KEY$(14)):POINT #QF,QS,QT:GOTO BGET
580 QA=RADR:QL=RLEN:QF=2:QS=ASC(KEY$(12))*256+ASC(KEY$(13)):QT=ASC(KEY$(14)):POINT #QF,QS,QT:GOTO BPUT
```

```
799 REM .....MISCELLANEOUS ROUTINES... .
800 REM Print DATE
805 QM=INT(QDATE/10000):QT=QDATE-QM*10000:QD=INT(QT/C100):QY=QT-QD*C100:IF QM<1 OR QM>12 THEN QD$="???":GOTO 810
807 QT=10000*QY+100*QM+QD:QD$=MONTH$(QM*3,QM*3+2)
810 QD$(4)=STR$(QD+C100):QD$(4,4)=" "
820 QD$(7)=STR$(C100+QY):QD$(7,7)=",":RETURN
825 REM PRETTY formatted print
827 IF ABS(QN)>=1000000000 THEN FMT$=STR$(QN):RETURN
829 QT=INT(ABS(QN)*C100+0.5):F2$=" $":IF QN<0 THEN F2$="($"
831 F2$(3)=STR$(INT(QT/C100)):F2$(LEN(F2$)+ONE)=".":QT=QT-C100*INT(QT/C100)
833 FMT$=STR$(C100+QT):F2$(LEN(F2$)+ONE)=FMT$(2,3):FMT$=BLANK$:FMT$(15-LEN(F2$))=F2$
835 IF QN<ZERO THEN FMT$(15)=")"
837 RETURN
850 REM YESNO
853 ? "(Y OR N)? ";
855 GET #ONE,QYN:IF QYN=89 OR QYN=121 THEN ? "Y";:QYN=YES:RETURN
857 IF QYN=78 OR QYN=110 THEN ? "N";:QYN=NO:RETURN
859 ? CHR$(253);:GOTO 855
860 REM ASK FOR AND OPEN PRINT FILE
861 CLOSE #PR
862 PRFLAG=NO:FMT$="E:":? :? "OUTPUT TO GO TO PRINTER ";:GOSUB YESNO:? :IF QYN THEN FMT$="P:":PRFLAG=YES
864 OPEN #PR,8,ZERO,FMT$:RETURN
875 REM BACK TO MAMA
877 GRAPHICS 2:PRINT #6:PRINT #6:PRINT #6;"     MICROREC":PRINT #6:PRINT #6:PRINT #6;"        by"
879 PRINT #6;"  C O M P U M A X":? :? :? :? "    ...please wait...":TRAP 881:RUN "D1:MICROREC"
881 ? :? "Input disk with 'MICROREC' in D1,please":? :? "Have you done so ";:GOSUB YESNO:? :IF QYN THEN GOTO GOBACK
883 GOTO 881
900 QF=7:OPEN #QF,IN,ZERO,"D2:CUSTFILE.NDX":DIM CIX$(1),CIX(CMAX):QA=ADR(CIX$)+ONE:QL=6*(CMAX+ONE)
902 GOSUB BGET:CLOSE #QF:RETURN
910 QF=7:OPEN #QF,OUT,ZERO,"D2:CUSTFILE.NDX":QA=ADR(CIX$)+ONE:QL=6*(CMAX+ONE):GOSUB BPUT:CLOSE #QF:RETURN
920 QF=7:OPEN #QF,IN,ZERO,"D2:JOUREC.NDX":QA=JADR+33:QL=6:GOSUB BGET
922 QT=INT(JDATE(ZERO)/IE7):IF QT=ZERO THEN QT=JMAX
923 DIM JIX$(ONE),JIX(QT):JIX(ZERO)=JDATE(ZERO)
924 QA=ADR(JIX$)+7:QL=6*QT:GOSUB BGET:CLOSE #QF:RETURN
930 QF=7:OPEN #QF,OUT,ZERO,"D2:JOUREC.NDX":QA=ADR(JIX$)+ONE:QL=6*(JMAX+ONE):GOSUB BPUT:CLOSE #QF:RETURN
940 QF=7:OPEN #QF,IN,ZERO,"D2:RECFIL.NDX":QL=14*(RMAX+ONE):DIM RIX$(QL):QA=ADR(RIX$)
942 RIX$(QL)="?":GOSUB BGET:CLOSE #QF:RETURN
950 QF=7:OPEN #QF,OUT,ZERO,"D2:RECFIL.NDX":QA=ADR(RIX$):QL=14*(RMAX+ONE):GOSUB BPUT:CLOSE #QF:RETURN
1000 REM xxxxxxxxxxxxxxxxxxxxxxxxxxx
1001 REM x
1002 REM x REC3 -- CUSTOMER FILE LIST
1003 REM x         AND EDIT.
1004 REM x
1005 REM xxxxxxxxxxxxxxxxxxxxxxxxxxx
1020 LET CLRCUST=8000:SETUPCUST=8200
1030 DIM TEMP$(40)
1100 REM MENU
1110 GRAPHICS ZERO:? "MICROREC 3 -- LIST/EDIT CUSTOMER FILE":? :?
1120 ? "31 - EXAMINE/EDIT CUSTOMER FILE"
1130 ? "32 - LIST CUSTOMER FILE BY NUMBER"
1140 ? "33 - LIST CUSTOMER FILE BY NAME"
1190 ? :? " 0 - EXIT"
1200 REM VECTOR
1205 TRAP 1100
```

```
1210 ? :? :? "SELECT AN OPTION ";:INPUT OPT
1220 IF OPT=ZERO THEN GOTO GOBACK
1230 IF OPT<31 OR OPT>33 OR OPT<>INT(OPT) THEN ? "}}":GOTO 1100
1280 TRAP UNTRAP
1290 ON OPT-30 GOTO 2000,3000,4000
1299 STOP
1900 REM ......END EDIT SESSION.......
1910 GOSUB CLRCUST:QI=CIX(ZERO):GOSUB CIGET:REM GET HEADER INFO AS IT WAS
1920 CDAT(2)=NUMCUST:CDAT(3)=CUSTHIGH
1930 QI=CIX(ZERO):GOSUB CIPUT
1980 CLOSE #3:GOSUB WRITECIX
1990 RUN
2000 REM ....EXAMINE/EDIT CUSTFILE.... .
2020 GOSUB SETUPCUST
2100 TRAP 2100
2110 GRAPHICS ZERO:? "EXAMINE/EDIT CUSTOMER FILE":? :?
2120 ? "YOUR OPTIONS:":? :? "- ENTER A CUSTOMER NUMBER TO VIEW/EDIT  AN EXISTING CUSTOMER'S DATA"
2125 ? "- ENTER A NUMBER NOT CURRENTLY IN USE   TO FORCE ASSIGNMENT OF THAT NUMBER    TO A NEW CUSTOMER"
2130 ? "- ENTER JUST  RETURN  TO ENTER A NEW    CUSTOMER...THIS PROGRAM ASSIGNS THE   CUSTOMER NUMBER"
2135 ? "- ENTER 'END' (OR SINGLE LETTER 'E')    TO END EXAMINE/EDIT SESSION"
2140 ? :? :? "YOUR ENTRY ";:INPUT FMT$
2150 IF LEN(FMT$)=ZERO THEN CURCUST=CUSTHIGH+ONE:QN=CURCUST:GOTO 2200
2155 IF FMT$(1,1)="E" THEN 1900
2160 QN=VAL(FMT$):IF QN<0 OR QN>999 OR QN<>INT(QN) THEN ? " BAD CUSTOMER NUMBER ":GOTO 2140
2170 CURCUST=QN:IF QN THEN 2200
2175 CUSTIX=ZERO:REM ALWAYS SO FOR CUS NUM OF 0
2180 ? :? "'CUSTOMER' number 0 is actually THIS  company's name and address, used in"
2182 ? "report printing...is this what you    really want to edit ";:GOSUB YESNO
2184 IF QYN THEN 2500
2186 GOTO 2100
2200 REM CHK FOR EXISTING CUSTOMER
2205 TRAP UNTRAP
2210 FOR CUSTIX=ZERO TO NUMCUST:QI=INT(CIX(CUSTIX)/IE7):IF QN=QI THEN 2500
2220 IF QN<QI THEN 2300
2230 NEXT CUSTIX
2250 REM ....ADD NEW CUSTOMER.........
2300 ? :? "Customer number ";QN;" is not in":? "  current use.  Shall I create a"
2302 ? "  new customer entry ";:GOSUB YESNO:IF QYN=ZERO THEN 2100
2310 IF CUSTIX>CMAX THEN ? :? :? " ERROR: CUSTOMER FILE IS FULL )":FOR QI=1 TO 1000:NEXT QI:GOTO 2100
2312 GRAPHICS ZERO:? " New customer ":? "Customer number ";CURCUST:? :?
2315 GOSUB CLRCUST:DOK=NO:GOSUB 2800:REM GET DATA
2330 QI=CIX(CMAX):IF CUSTIX=CMAX THEN 2360
2340 FOR QT=CMAX TO CUSTIX+ONE STEP -ONE:CIX(QT)=CIX(QT-ONE):NEXT QT
2360 QI=QI-IE7*INT(QI/IE7)+IE7*CURCUST
2365 TEMP$=STR$(CURCUST+1000):CNUM$=TEMP$(2,4)
2370 CIX(CUSTIX)=QI:GOSUB CIPUT
2380 NUMCUST=NUMCUST+ONE:IF CURCUST>CUSTHIGH THEN CUSTHIGH=CURCUST
2500 REM ..........................
2501 GRAPHICS ZERO:POSITION 10,12:? "...please wait..."
2505 GOSUB CLRCUST:QI=CIX(CUSTIX):GOSUB CIGET
2510 GRAPHICS ZERO:? "Customer number ";CNUM$:? :GOSUB 2900
2512 TRAP UNTRAP:TEMP$=CNUM$:CURCUST=VAL(TEMP$):TRAP 2510
2515 POSITION 2,15:? "------------------------------------"
2520 ? "Backwards in file  Forwards in file"
```

```
2522 ? "Change this data   Delete this cust."
2524 ? "              Exit"
2526 ? :? :? "Select a code > ";:GET #ONE,OPT:IF OPT<66 OR OPT>70 THEN ? "?";:GOTO 2515
2530 ON OPT-65 GOTO 2600,2550,2700,2650,2750
2549 STOP
2550 REM ........CHANGE DATA.......... .
2555 PRINT 2555,CNUM$
2560 GRAPHICS ZERO:GOSUB 2900:? :? :DOK=YES:GOSUB 2800
2570 QI=CIX(CUSTIX):GOSUB CIPUT
2590 GOTO 2500
2600 REM ........BACKWARDS............. .
2610 CUSTIX=CUSTIX-ONE:IF CUSTIX<ONE THEN 2650
2620 GOTO 2500
2650 REM ........EXIT.................. .
2690 GOTO 2100
2700 REM ........DELETE................ .
2710 GRAPHICS ZERO:? :? :? " CAUTION: ":? :? "delete customer # ";CNUM$;" ";:GOSUB YESNO:IF QYN=NO THEN 210C
2720 QI=CIX(CUSTIX):QI=QI-IE7*INT(QI/IE7):IF CUSTIX=CMAX THEN 2730
2725 FOR QQ=CUSTIX TO CMAX-ONE:CIX(QQ)=CIX(QQ+ONE):NEXT QQ
2730 CIX(CMAX)=QI
2740 NUMCUST=NUMCUST-ONE:CUSTHIGH=INT(CIX(NUMCUST)/IE7):GOTO 2650
2750 REM ........FORWARDS.............. .
2760 IF CUSTIX>=NUMCUST THEN 2650
2770 IF CIX(CUSTIX+ONE)<IE7 THEN 2650
2780 CUSTIX=CUSTIX+ONE:GOTO 2500
2800 REM ..............................
2801 REM ASK FOR NEW/EDITED INFO
2805 CHANGE=NO
2810 FMT$="name":GOSUB 2880:IF QT THEN CNAME$=TEMP$
2812 FMT$="addr line 1":GOSUB 2880:IF QT THEN CADDR1$=TEMP$
2814 FMT$="addr line 2":GOSUB 2875:IF QT THEN CADDR2$=TEMP$
2816 FMT$="city":GOSUB 2880:IF QT THEN CCITY$=TEMP$
2818 FMT$="state abbreviation":GOSUB 2880:IF QT THEN CSTATE$=TEMP$
2820 FMT$="zip code (5 or 9 digit)":GOSUB 2880:IF QT THEN CDAT(ZERO)=VAL(TEMP$)
2822 QN=ZERO:FMT$="area code of phone number":GOSUB 2875:IF QT THEN QN=VAL(TEMP$)
2824 FMT$="phone number (7 digits)":GOSUB 2875:IF QT THEN CDAT(ONE)=QN*IE7+VAL(TEMP$)
2825 IF CUSTIX=ZERO THEN 2830
2826 FMT$="default DR ledger account":GOSUB 2875:IF QT THEN CDAT(2)=VAL(TEMP$)
2828 FMT$="default CR ledger account":GOSUB 2875:IF QT THEN CDAT(3)=VAL(TEMP$)
2830 FMT$="remarks":GOSUB 2875:IF QT THEN CREM$=TEMP$
2840 RETURN
2875 QQ=DOK:DOK=YES:GOSUB 2880:DOK=QQ:RETURN
2880 ? FMT$;" ";:INPUT TEMP$:QT=LEN(TEMP$):IF QT THEN CHANGE=YES:TEMP$(LEN(TEMP$)+1)=BLANK$:RETURN
2882 IF DOK THEN RETURN
2884 ? "?";:GOTO 2880
2900 REM ..............................
2901 REM PRINT INFO ABOUT CUST
2910 ? "   name: ";CNAME$:? "address: ";CADDR1$:? "         ";CADDR2$
2912 ? "         ";CCITY$;" ";CSTATE$;" ";CDAT(ZERO)
2914 QT=CDAT(ONE):QM=INT(QT/IE7):TEMP$=STR$(QT-IE7*QM+IE7)
2916 ? "  phone: (";QM;") ";TEMP$(2,4);"-";TEMP$(5,8)
2918 IF CUSTIX THEN ? "default DR acct # ";CDAT(2);"   CR acct # ";CDAT(3)
2920 ? "remarks: ";CREM$
2990 RETURN
```

```
3000 REM ....LIST CUSTFILE BY NUMBER.. .
3005 TRAP 3000
3010 GRAPHICS ZERO:? "LIST CUSTOMER FILE BY CUSTOMER NUMBER":? :? :?
3020 ? "Do you wish to specify a range of       customer numbers ";GOSUB YESNO:? :?
3030 IF QYN=NO THEN CLOW=ONE:CHIGH=999:GOTO 3100
3040 ? "Lowest customer number to list  ";:INPUT CLOW:IF CLOW<ZERO OR CLOW>999 THEN 3040
3050 ? "Highest customer number to list ";:INPUT CHIGH:IF CHIGH<ZERO OR CHIGH>999 THEN 3050
3060 IF CLOW>CHIGH THEN ? "ERROR: CAN'T LIST BACKWARDS ":GOTO 3040
3100 REM
3105 TRAP UNTRAP
3110 GRAPHICS ZERO:GOSUB PRQUERY
3120 ? :? :? "Do you want just names and numbers      (as opposed to all information)"
3125 ? "  for each customer ";:GOSUB YESNO:PSHORT=QYN
3150 GOSUB SETUPCUST
3160 GRAPHICS ZERO:FOR QT=1 TO 8:PRINT #PR:NEXT QT
3170 IF PSHORT THEN PRINT #PR;" #   CUSTOMER NAME":PRINT #PR:GOTO 3200
3200 FOR CUSTIX=ZERO TO NUMCUST
3210 QI=CIX(CUSTIX):QN=INT(QI/IE7):IF QN<CLOW THEN GOTO 3590
3220 IF QN>CHIGH THEN 3600
3230 GOSUB CLRCUST:GOSUB CIGET
3240 IF PRFLAG OR PSHORT THEN 3300
3250 GRAPHICS ZERO:? "Customer number ";CNUM$:?
3260 GOSUB 2900
3270 ? :? :? :? :? " hit any key to continue";:GET #ONE,QT
3280 GOTO 3590
3300 REM PRINTER OR SHORT FORMAT
3310 PRINT #PR;CNUM$;"  ";CNAME$
3315 IF PSHORT THEN 3590
3320 PRINT #PR,CADDR1$
3330 IF CADDR2$<>BLANK$(ONE,LEN(CADDR2$)) THEN PRINT #PR,CADDR2$
3340 PRINT #PR,CCITY$;" ";CSTATE$,;" ";CDAT(ZERO)
3350 QT=CDAT(ONE):QM=INT(QT/IE7):TEMP$=STR$(QT-IE7*QM+IE7)
3360 PRINT #PR,"  phone: (";QM;") ";TEMP$(2,4);"-";TEMP$(5,8)
3370 IF CUSTIX THEN PRINT #PR,"DR acct # ";CDAT(2);"   CR acct # ";CDAT(3)
3380 PRINT #PR,"remarks: ";CREM$
3390 PRINT #PR:PRINT #PR
3590 NEXT CUSTIX
3600 REM DONE
3610 FOR QT=1 TO 6:PRINT #PR:NEXT QT
3700 GOTO 4750
4000 REM .....LIST BY NAME..... .
4105 TRAP UNTRAP
4110 GRAPHICS ZERO:GOSUB PRQUERY
4120 ? :? :? "Do you want just names and numbers      (as opposed to all information)"
4125 ? "  for each customer ";:GOSUB YESNO:PSHORT=QYN
4150 GOSUB SETUPCUST
4155 IF NUMCUST=ZERO THEN ? "ERROR: EMPTY CUSTOMER FILE":STOP
4160 GRAPHICS ZERO:FOR QT=1 TO 8:PRINT #PR:NEXT QT
4170 IF PSHORT THEN PRINT #PR;" #   CUSTOMER NAME":PRINT #PR
4180 NMLEN=INT((FRE(0)-500)/CMAX):IF NMLEN>28 THEN NMLEN=28
4185 NMIX=NMLEN*CMAX+NMLEN:DIM NMIX$(NMIX),NM$(NMLEN),NM2$(NMLEN)
4190 NMIX$=" ":NMIX$(NMIX)=" ":NMIX$(2,NMIX)=NMIX$(ONE)
4195 QQ=NMLEN-3:REM LEN OF ACTUAL NAME
4200 FOR CUSTIX=ONE TO NUMCUST:QI=CIX(CUSTIX):GOSUB CIGET
```

```
4210 NM$=CNAME$:NM$(NMLEN-2)=CNUM$
4250 FOR QT=NMIX-NMLEN TO ONE STEP -NMLEN:IF NM$(ONE,QQ)>NMIX$(QT+ONE,QT+QQ) THEN 4280
4260 NEXT QT:PRINT " ERROR:  INCONSISTENT CUSTOMER NAME??":STOP
4280 NMIX$(ONE,QT)=NMIX$(ONE+NMLEN,QT+NMLEN):NMIX$(QT+ONE,QT+NMLEN)=NM$
4290 NEXT CUSTIX
4300 REM ALL SORTED, NOW MUST PRINT OUT
4305 NM$=BLANK$
4310 FOR CUSTIX=ONE TO NMIX STEP NMLEN:IF NMIX$(CUSTIX,CUSTIX+3)="    " THEN 4590
4320 NM$=NMIX$(CUSTIX+NMLEN-3,CUSTIX+NMLEN-1):QQ=VAL(NM$)
4330 FOR QT=ONE TO NUMCUST:IF INT(CIX(QT)/IE7)=QQ THEN 4350
4340 NEXT QT:? "ERROR:  SORT ERROR???":STOP
4350 QI=CIX(QT):GOSUB CIGET
4360 IF PRFLAG OR PSHORT THEN 4400
4365 GRAPHICS ZERO:? "Customer number ";CNUM$:?
4370 GOSUB 2900
4375 ? :? :? :? :? " hit any key to continue";:GET #ONE,QT
4380 GOTO 4590
4400 REM PRINTER OR SHORT FORMAT
4410 PRINT #PR;CNUM$;"  ";CNAME$
4415 IF PSHORT THEN 4590
4420 PRINT #PR,CADDR1$
4430 IF CADDR2$<>BLANK$(ONE,LEN(CADDR2$)) THEN PRINT #PR,CADDR2$
4440 PRINT #PR,CCITY$;" ";CSTATE$,;" ";CDAT(ZERO)
4450 QT=CDAT(ONE):QM=INT(QT/IE7):TEMP$=STR$(QT-IE7*QM+IE7)
4460 PRINT #PR,"  phone: (";QM;") ";TEMP$(2,4);"-";TEMP$(5,8)
4470 PRINT #PR,"DR acct # ";CDAT(2);"   CR acct # ";CDAT(3)
4480 PRINT #PR,"remarks: ";CREM$
4490 PRINT #PR:PRINT #PR
4590 NEXT CUSTIX
4700 CLOSE #3
4750 REM ALLOW VIEWING
4760 IF PRFLAG THEN RUN
4770 ? :? :? " hit any key to exit";:GET #ONE,QT:RUN
8000 REM CLR CUST FILE DATA FIELDS
8010 CNUM$="000":CNAME$=BLANK$:CADDR1$=BLANK$:CADDR2$=BLANK$
8020 CCITY$=BLANK$:CSTATE$=BLANK$:CREM$=BLANK$
8030 CDAT(ZERO)=ZERO:CDAT(ONE)=ZERO:CDAT(2)=ZERO:CDAT(3)=ZERO
8090 RETURN
8200 REM .....OPEN/SETUP CUSTFILE..... .
8210 ? :? "   ...please wait..."
8220 GOSUB CLRCUST:GOSUB READCIX
8230 OPEN #3,12,ZERO,CUFN$
8240 QI=CIX(ZERO):GOSUB CIGET:REM GET HEADER RECORD
8250 NUMCUST=CDAT(2):CUSTHIGH=CDAT(3)
8260 IF NUMCUST>CMAX THEN PRINT " ERROR: INCONSISTENT CUSTOMER FILE ":STOP
8290 RETURN
```

```
10 REM -- MICROREC --
20 REM ACCOUNTS RECEIVABLE PROGRAM       FROM COMPUMAX ASSOCIATES, INC.
30 REM 467 HAMILTON AVE.
40 REM PALO ALTO, CA 94301
50 REM COPYRIGHT (C) 1980, COMPUMAX
60 REM
70 REM UNDER PROTECTION OF CALIFORNIA TRADE SECRET LAW.  DO NOT COPY, RENAME, CHANGE, CONVERT, OR EXPAND
80 REM FOR RESALE WITHOUT WRITTEN AGREEMENT WITH COMPUMAX.
90 REM ----------------------------
100 REM RCOMMON -- CODE COMMON TO ALL      MICROREC MODULES
105 REM
110 REM SUBROUTINE ADDRESSES
120 IGET=505:BGET=510:IPUT=515:BPUT=520
125 JIGET=530:JIPUT=540:CIGET=550:CIPUT=560:RIGET=570:RIPUT=580
150 PDATE=800:PRETTY=825:PRQUERY=860:YESNO=850:GOBACK=875
160 LET READCIX=900:WRITECIX=910:LET READJIX=920:WRITEJIX=930:LET READRIX=940:WRITERIX=950
200 REM DIMENSION, ETC.
210 DIM QD$(9),FMT$(40),F2$(15),BLANK$(40):BLANK$=''                                    ":ELANK$(40)=" ":BLANK$(2,39)=BLANK$
220 DIM MONTH$(40):MONTH$="??JANFEBMARAPRMAYJUNJULAUGSEPOCTNOVDEC"
290 C100=100:IE7=10000000:ZERO=0:LET ONE=1:UNTRAP=40000:YES=ONE:NO=ZERO
292 PR=5:IN=4:OUT=8
350 REM FILE NAMES, DATA FILES ONLY
351 REM NAMES OF INDEX FILES ARE
352 REM IN LINES 900-999
360 DIM CUFN$(15):CUFN$="D2:CUSTFILE.DAT"
370 DIM JFN$(15):JFN$="D2:JOUREC.DAT"
380 DIM RFN$(15):RFN$="D2:RECFIL.DAT"
390 DIM RMFN$(15):RMFN$="D2:RECMAST.DAT"
400 REM ===== RECORD LAYOUTS ========= .
409 REM ......JOURNAL FILE ........... .
410 DIM JACCT$(3),JDESC$(30),JDATE(ZERO),JAMT(ZERO),JDATE2(ZERO):JLEN=45
415 JMAX=200:JADR=ADR(JACCT$)
419 REM .....CUSTOMER FILE ........... .
420 DIM CNUM$(3),CNAME$(25),CADDR1$(25),CADDR2$(15),CCITY$(15),CSTATE$(2),CREM$(16),CDAT(4):CULEN=125
425 CMAX=200:CADR=ADR(CNUM$)
429 REM .....RECFILE AND RECMAST..... .
430 DIM RCNUM$(3),RINV$(8),RPO$(8),RDATE(ZERO),RDESC$(20),RTERM$(20),RAMT(ZERO),RDAT(9):RLEN=125
435 RMAX=50:LET RADR=ADR(RCNUM$):REM FOR RECFIL
440 MRMAX=300:REM FOR RECMAST
480 IF PEEK(1664)<>160 THEN GOTO GOBACK
499 OPEN #ONE,4,ZERO,"K:":GOTO 1000
500 REM ... GET AND PUT ROUTINES ..... .
505 QI=QI-IE7*INT(QI/IE7):QT=INT(QI/1000):QI=QI-1000*QT:POINT #QF,QT,QI
510 QT=USR(1664,QF,QA,QL):IF QT=ONE OR QT=3 THEN RETURN
511 PRINT " BAD BGET...STATUS ";QT:STOP
515 QI=QI-IE7*INT(QI/IE7):QT=INT(QI/1000):QI=QI-1000*QT:POINT #QF,QT,QI
520 QT=USR(1668,QF,QA,QL):IF QT=ONE OR QT=3 THEN RETURN
521 PRINT " BAD BPUT...STATUS ";QT:STOP
530 QA=JADR:QL=JLEN:QF=4:GOTO IGET
540 QA=JADR:QL=JLEN:QF=4:GOTO IPUT
550 QA=CADR:QL=CULEN:QF=3:GOTO IGET
560 QA=CADR:QL=CULEN:QF=3:GOTO IPUT
570 QA=RADR:QL=RLEN:QF=2:QS=ASC(KEY$(12))*256+ASC(KEY$(13)):QT=ASC(KEY$(14)):POINT #QF,QS,QT:GOTO BGET
580 QA=RADR:QL=RLEN:QF=2:QS=ASC(KEY$(12))*256+ASC(KEY$(13)):QT=ASC(KEY$(14)):POINT #QF,QS,QT:GOTO BPUT
```

```
799 REM .....MISCELLANEOUS ROUTINES... .
800 REM Print DATE
805 QM=INT(QDATE/10000):QT=QDATE-QM*10000:QD=INT(QT/C100):QY=QT-QD*C100:IF QM<1 OR QM>12 THEN QD$="???":GOTO 810
807 QT=10000*QY+100*QM+QD:QD$=MONTH$(QM*3,QM*3+2)
810 QD$(4)=STR$(QD+C100):QD$(4,4)=" "
820 QD$(7)=STR$(C100+QY):QD$(7,7)=",":RETURN
825 REM PRETTY formatted print
827 IF ABS(QN)>=1000000000 THEN FMT$=STR$(QN):RETURN
829 QT=INT(ABS(QN)*C100+0.5):F2$=" $":IF QN<0 THEN F2$="($"
831 F2$(3)=STR$(INT(QT/C100)):F2$(LEN(F2$)+ONE)=".":QT=QT-C100*INT(QT/C100)
833 FMT$=STR$(C100+QT):F2$(LEN(F2$)+ONE)=FMT$(2,3):FMT$=BLANK$:FMT$(15-LEN(F2$))=F2$
835 IF QN<ZERO THEN FMT$(15)=")"
837 RETURN
850 REM YESNO
853 ? "(Y OR N)? ";
855 GET #ONE,QYN:IF QYN=89 OR QYN=121 THEN ? "Y";:QYN=YES:RETURN
857 IF QYN=7:                          3 OR QYN=110 THEN ? "N";:QYN=NO:RETURN
859 ? CHR$(253);:GOTO 855
860  REM ASK FOR AND OPEN PRINT FILE
861 CLOSE #PR
862 PRFLAG=NO:FMT$="E:":? :? "OUTPUT TO GO TO PRINTER ";:GOSUB YESNO:? :IF QYN THEN FMT$="P:":PRFLAG=YES
864 OPEN #PR,8,ZERO,FMT$:RETURN
875 REM BACK TO MAMA
877 GRAPHICS 2:PRINT #6:PRINT #6:PRINT #6;"     MICROREC":PRINT #6:PRINT #6:PRINT #6;"        by"
879 PRINT #6;"  C O M P U M A X":? :? :? :? "     ...please wait...":TRAP 881:RUN "D1:MICROREC"
881 ? :? "Put disk with 'MICROREC' in D1,please":? :? "Have you done so ";:GOSUB YESNO:? :IF QYN THEN GOTO GOBACK
883 GOTO 881
900 QF=7:OPEN #QF,IN,ZERO,"D2:CUSTFILE.NDX":DIM CIX$(1),CIX(CMAX):QA=ADR(CIX$)+ONE:QL=6*(CMAX+ONE)
902 GOSUB BGET:CLOSE #QF:RETURN
910 QF=7:OPEN #QF,IN+OUT,ZERO,"D2:CUSTFILE.NDX":QA=ADR(CIX$)+ONE:QL=6*(CMAX+ONE):GOSUB BPUT:CLOSE #QF:RETURN
920 QF=7:OPEN #QF,IN,ZERO,"D2:JOUREC.NDX":QA=JADR+33:QL=6:GOSUB BGET
922 QT=INT(JDATE(ZERO)/1E7):IF QT=ZERO THEN QT=JMAX
923 DIM JIX$(ONE),JIX(QT+ONE):JIX(ZERO)=JDATE(ZERO)
924 QA=ADR(JIX$)+7:QL=6*QT:GOSUB BGET:CLOSE #QF:RETURN
930 QF=7:OPEN #QF,IN+OUT,ZERO,"D2:JOUREC.NDX":QA=ADR(JIX$)+ONE:QL=6*(JMAX+ONE):GOSUB BPUT:CLOSE #QF:RETURN
940 QF=7:OPEN #QF,IN,ZERO,"D2:RECFIL.NDX":QL=14*(RMAX+ONE):DIM RIX$(QL):QA=ADR(RIX$)
942 RIX$(QL)="?":GOSUB BGET:CLOSE #QF:RETURN
950 QF=7:OPEN #QF,IN+OUT,ZERO,"D2:RECFIL.NDX":QA=ADR(RIX$):QL=14*(RMAX+ONE):GOSUB BPUT:CLOSE #QF:RETURN
1000 REM xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
1010 REM x
1020 REM x PRINT AGED RECEIVABLES
1030 REM x
1040 REM xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
1050 DIM TEMP$(40),KEY$(14):RMAX=MRMAX:REM FOR CONSISTENCY
1055 DIM TD$(10)
1070 DIM MONTH(12):RESTORE 1075:FOR QT=ONE TO 12:READ QQ:MONTH(QT)=QQ:NEXT QT
1075 DATA 0,31,59,90,120,151,181,212, 243,273,304,334,365
1100 GRAPHICS ZERO:? "PRINT AGED RECEIVABLES":? :? :?
1105 TRAP 1105
1110 ? "TODAY'S DATE (MMDDYY) ";:INPUT QDATE:GOSUB PDATE:? "";QD$
1115 GOSUB 9000:TODAY=QN:REM SAVE JULIAN FOR TODAY
1120 ? :? "DATE OKAY ";:GOSUB YESNO:IF QYN=NO THEN 1100
1125 TD$=QD$
1130 ? :? :? "Invoice Number, Customer Number,       Invoice Date, and Outstanding "
```

```
1132 ? "  Balance will be shown for each        invoice."
1134 ? :? "Would you also like to see Customer     Names ";:GOSUB YESNO:FLAGCN=QYN
1136 ? :? "Would you also like to see Addresses,   etc.  ";:GOSUB YESNO:FLAGCI=QYN:IF FLAGCI THEN FLAGCN=NO
1138 ? :? "Would you also like to see Details for  each Invoice ";:GOSUB YESNO:FLAGII=QYN
1190 ? :? :GOSUB PRQUERY
1195 GRAPHICS ZERO:POSITION 2,10:? "   ...please wait..."
1200 REM WRITERIX, FOR RECMAST
1205 TRAP UNTRAP
1210 QF=7:OPEN #QF,IN,ZERO,"D2:RECMAST.NDX":QL=14*(RMAX+ONE):DIM RIX$(QL):QA=ADR(RIX$)
1220 RIX$(QL)="?":GOSUB BGET:CLOSE #QF
1250 GOSUB READCIX:REM WE NEED THIS
1260 OPEN #2,IN+OUT,ZERO,RMFN$
1270 OPEN #3,IN+OUT,ZERO,CUFN$
1300 CNUM$=BLANK$:CNAME$=BLANK$:CADDR1$=BLANK$:CADDR2$=BLANK$:CCITY$=BLANK$:CSTATE$=BLANK$:CREM$=BLANK$
1310 RCNUM$=BLANK$:RINV$=BLANK$:RPO$=BLANK$:RDESC$=BLANK$:RTERM$=BLANK$
1330 QI=CIX(ZERO):GOSUB CIGET:NUMCUST=CDAT(2)
1340 KEY$=RIX$(ONE):GOSUB RIGET:NUMREC=RAMT(ZERO)
1500 PRINT #PR:PRINT #PR:PRINT #PR;"          AGED RECEIVABLES":PRINT #PR;"                for"
1505 TEMP$="       "
1510 PRINT #PR:PRINT #PR;TEMP$;CNAME$
1520 PRINT #PR;TEMP$;CADDR1$:IF CADDR2$<>BLANK$(ONE,LEN(CADDR2$)) THEN PRINT #PR;TEMP$;CADDR2$
1530 PRINT #PR;TEMP$;CCITY$;" ";CSTATE$;" ";CDAT(ZERO)
2000 REM NOW THE ACTUAL WORK
2010 PRINT #PR:PRINT #PR:PRINT #PR;"A/R AGED TRIAL BALANCE ON ";TD$:PRINT #PR:PRINT #PR
2020 PRINT #PR;"INVOICES OUTSTANDING, 0 TO 30 DAYS":PRINT #PR
2030 DLOW=TODAY-30:DHIGH=1E+90:GOSUB 4000
2110 PRINT #PR:PRINT #PR:PRINT #PR;"A/R AGED TRIAL BALANCE ON ";TD$:PRINT #PR:PRINT #PR
2120 PRINT #PR;"INVOICES OUTSTANDING, 31 TO 60 DAYS":PRINT #PR
2130 DLOW=TODAY-60:DHIGH=TODAY-31:GOSUB 4000
2210 PRINT #PR:PRINT #PR:PRINT #PR;"A/R AGED TRIAL BALANCE ON ";TD$:PRINT #PR:PRINT #PR
2220 PRINT #PR;"INVOICES OUTSTANDING, 61 TO 90 DAYS":PRINT #PR
2230 DLOW=TODAY-90:DHIGH=TODAY-61:GOSUB 4000
2310 PRINT #PR:PRINT #PR:PRINT #PR;"A/R AGED TRIAL BALANCE ON ";TD$:PRINT #PR:PRINT #PR
2320 PRINT #PR;"INVOICES OUTSTANDING, OVER 90 DAYS":PRINT #PR
2330 DLOW=ZERO:DHIGH=TODAY-91:GOSUB 4000
2360 FOR QT=ONE TO 8:PRINT #PR:NEXT QT
2400 CLOSE #PR:CLOSE #2:CLOSE #3
2410 ? :? :? "ANOTHER TRIAL BALANCE ";:GOSUB YESNO:IF QYN THEN RUN
2420 GOTO GOBACK
4000 REM HEADER PRINTING
4020 PRINT #PR;"Invoice# Cu# Inv.Date        Balance"
4030 IF FLAGCN THEN PRINT #PR;"   Customer Name"
4040 IF FLAGCI THEN PRINT #PR;"   Customer Info"
4060 IF FLAGII THEN PRINT #PR;"      Invoice Detail"
4070 PRINT #PR:PRINT #PR
4080 CASH=ZERO
4200 FOR RECIX=ONE TO NUMREC:RP=14*RECIX:KEY$=RIX$(RP+ONE,RP+14):IF ASC(KEY$)=255 THEN GOTO 4850
4210 GOSUB RIGET:QDATE=RDATE(ZERO):GOSUB PDATE:GOSUB 9000:IF QN<DLOW OR QN>DHIGH THEN 4850
4215 RIX$(RP+ONE,RP+ONE)=CHR$(255)
4220 QN=RAMT(ZERO):FOR QT=ZERO TO 7 STEP 2:QN=QN-RDAT(QT):NEXT QT:IF QN=ZERO THEN 4850
4230 CASH=CASH+QN:GOSUB PRETTY:REM PREPARE TO PRINT OUTSTANDING
4240 PRINT #PR;RINV$;" ";RCNUM$;" ";QD$;" ";FMT$
4250 IF FLAGCI+FLAGCN=ZERO THEN 4400
4260 TEMP$=KEY$(9,11):QN=VAL(TEMP$)
4270 FOR CUSTIX=ONE TO NUMCUST:IF INT(CIX(CUSTIX)/1E7)<>QN THEN NEXT CUSTIX:? " BAD CUST# ":STOP
```

```
4280 QI=CIX(CUSTIX):GOSUB CIGET
4300 PRINT #PR;"   ";CNAME$
4310 IF FLAGCI=NO THEN 4400
4320 PRINT #PR;"   ";CADDR1$
4330 IF CADDR2$<>BLANK$(ONE,LEN(CADDR2$)) THEN PRINT #PR;"   ";CADDR2$
4340 PRINT #PR;"   ";CCITY$;" ";CSTATE$;" ";CDAT(ZERO)
4350 QT=CDAT(ONE):QM=INT(QT/1E7):QD=QT-1E7*QM:QY=INT(QD/10000):QD=QD-10000*QY
4360 PRINT #PR;"   (";QM;") ";QY;"-";QD
4400 REM INVOICE DETAIL?
4410 IF FLAGII=NO THEN 4800
4420 PRINT #PR;"      ";RDESC$
4430 QN=RAMT(ZERO):GOSUB PRETTY:PRINT #PR;FMT$;" invoiced"
4440 PRINT #PR;"      terms: ";RTERM$
4800 REM PRINTED ONE
4810 IF FLAGCN OR FLAGCI OR FLAGII THEN PRINT #PR
4820 IF FLAGCI THEN PRINT #PR
4850 NEXT RECIX:REM AND THEN DONE WITH THIS PERIOD
4860 PRINT #PR:PRINT #PR
4870 QN=CASH:GOSUB PRETTY:PRINT #PR;"xxx CASH PROJECTION xxx";FMT$:PRINT #PR:PRINT #PR
4880 PRINT #PR;"----------------------------------------"
4990 RETURN
5000 STOP
9000 REM CONVERT QY,QM,QD INTO JULIAN DATE
9010 QN=INT(365.25*QY)+MONTH(QM)+QD:IF QY/4=INT(QY/4) THEN IF QM<3 THEN QN=QN-ONE
9090 RETURN
```

```
10 REM — MICROREC —
20 REM ACCOUNTS RECEIVABLE PROGRAM       FROM COMPUMAX ASSOCIATES, INC.
30 REM 467 HAMILTON AVE.
40 REM PALO ALTO, CA 94301
50 REM COPYRIGHT (C) 1980, COMPUMAX
60 REM
70 REM UNDER PROTECTION OF CALIFORNIA TRADE SECRET LAW.  DO NOT COPY, RENAME, CHANGE, CONVERT, OR EXPAND
80 REM FOR RESALE WITHOUT WRITTEN AGREEMENT WITH COMPUMAX.
90 REM ----------------------------
100 REM RCOMMON — CODE COMMON TO ALL      MICROREC MODULES
105 REM
110 REM SUBROUTINE ADDRESSES
120 IGET=505:BGET=510:IPUT=515:BPUT=520
125 JIGET=530:JIPUT=540:CIGET=550:CIPUT=560:RIGET=570:RIPUT=580
150 PDATE=800:PRETTY=825:PRQUERY=860:YESNO=850:GOBACK=875
160 LET READCIX=900:WRITECIX=910:LET READJIX=920:WRITEJIX=930:LET READRIX=940:WRITERIX=950
200 REM DIMENSION, ETC.
210 DIM QD$(9),FMT$(40),FZ$(15),BLANK$(40):BLANK$=" ":BLANK$(40)=" ":BLANK$(2,39)=BLANK$
220 DIM MONTH$(40):MONTH$="??JANFEBMARAPRMAYJUNJULAUGSEPOCTNOVDEC"
290 C100=100:IE7=10000000:ZERO=0:LET ONE=1:UNTRAF=40000:YES=ONE:NO=ZERO
292 PR=5:IN=4:OUT=8
350 REM FILE NAMES, DATA FILES ONLY
351 REM NAMES OF INDEX FILES ARE
352 REM IN LINES 900-999
360 DIM CUFN$(15):CUFN$="D2:CUSTFILE.DAT"
370 DIM JFN$(15):JFN$="D2:JOUREC.DAT"
380 DIM RFN$(15):RFN$="D2:RECFIL.DAT"
390 DIM RMFN$(15):RMFN$="D2:RECMAST.DAT"
400 REM ===== RECORD LAYOUTS ========= .
409 REM ......JOURNAL FILE ........... .
410 DIM JACCT$(3),JDESC$(30),JDATE(ZERO),JAMT(ZERO),JDATE2(ZERO):JLEN=45
415 JMAX=200:JADR=ADR(JACCT$)
419 REM .....CUSTOMER FILE ........... .
420 DIM CNUM$(3),CNAME$(25),CADDR1$(25),CADDR2$(15),CCITY$(15),CSTATE$(2),CREM$(16),CDAT(4):CULEN=125
425 CMAX=200:CADR=ADR(CNUM$)
429 REM .....RECFILE AND RECMAST..... .
430 DIM RCNUM$(3),RINV$(8),RPO$(8),RDATE(ZERO),RDESC$(20),RTERM$(20),RAMT(ZERO),RDAT(9):RLEN=125
435 RMAX=50:LET RADR=ADR(RCNUM$):REM FOR RECFIL
440 MRMAX=300:REM FOR RECMAST
480 IF PEEK(1664)<>160 THEN GOTO GOBACK
499 OPEN #ONE,4,ZERO,"K:":GOTO 1000
500 REM ... GET AND PUT ROUTINES ..... .
505 QI=QI-IE7*INT(QI/IE7):QT=INT(QI/1000):QI=QI-1000*QT:POINT #QF,QT,QI
510 QT=USR(1664,QF,QA,QL):IF QT=ONE OR QT=3 THEN RETURN
511 PRINT " BAD BGET...STATUS ";QT:STOP
515 QI=QI-IE7*INT(QI/IE7):QT=INT(QI/1000):QI=QI-1000*QT:POINT #QF,QT,QI
520 QT=USR(1668,QF,QA,QL):IF QT=ONE OR QT=3 THEN RETURN
521 PRINT " BAD BPUT...STATUS ";QT:STOP
530 QA=JADR:QL=JLEN:QF=4:GOTO IGET
540 QA=JADR:QL=JLEN:QF=4:GOTO IPUT
550 QA=CADR:QL=CULEN:QF=3:GOTO IGET
560 QA=CADR:QL=CULEN:QF=3:GOTO IPUT
570 QA=RADR:QL=RLEN:QF=2:QS=ASC(KEY$(12))*256+ASC(KEY$(13)):QT=ASC(KEY$(14)):POINT #QF,QS,QT:GOTO BGET
580 QA=RADR:QL=RLEN:QF=2:QS=ASC(KEY$(12))*256+ASC(KEY$(13)):QT=ASC(KEY$(14)):POINT #QF,QS,QT:GOTO BPUT
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799 REM .....MISCELLANEOUS ROUTINES... .
800 REM Print DATE
805 QM=INT(QDATE/10000):QT=QDATE-QM*10000:QD=INT(QT/C100):QY=QT-QD*C100:IF QM<1 OR QM>12 THEN QD$="???":GOTO 810
807 QT=10000*QY+100*QM+QD:QD$=MONTH$(QM*3,QM*3+2)
810 QD$(4)=STR$(QD+C100):QD$(4,4)=" "
820 QD$(7)=STR$(C100+QY):QD$(7,7)=",":RETURN
825 REM PRETTY formatted print
827 IF ABS(QN)>=1000000000 THEN FMT$=STR$(QN):RETURN
829 QT=INT(ABS(QN)*C100+0.5):F2$=" $":IF QN<0 THEN F2$="($"
831 F2$(3)=STR$(INT(QT/C100)):F2$(LEN(F2$)+ONE)=".":QT=QT-C100*INT(QT/C100)
833 FMT$=STR$(C100+QT):F2$(LEN(F2$)+ONE)=FMT$(2,3):FMT$=BLANK$:FMT$(15-LEN(F2$))=F2$
835 IF QN<ZERO THEN FMT$(15)=")"
837 RETURN
850 REM YESNO
853 ? "(Y OR N)? ";
855 GET #ONE,QYN:IF QYN=89 OR QYN=121 THEN ? "Y";:QYN=YES:RETURN
857 IF QYN=78 OR QYN=110 THEN ? "N";:QYN=NO:RETURN
859 ? CHR$(253);:GOTO 855
860 REM ASK FOR AND OPEN PRINT FILE
861 CLOSE #PR
862 PRFLAG=NO:FMT$="E:":? :? "OUTPUT TO GO TO PRINTER ";:GOSUB YESNO:? :IF QYN THEN FMT$="P:":PRFLAG=YES
864 OPEN #PR,8,ZERO,FMT$:RETURN
875 REM BACK TO MAMA
877 GRAPHICS 2:PRINT #6:PRINT #6:PRINT #6;"     MICROREC":PRINT #6:PRINT #6:PRINT #6;"        by"
879 PRINT #6;"  C O M P U M A X":? :? :? :? "    ...please wait...":TRAP 881:RUN "D1:MICROREC"
881 ? :? "Input disk with 'MICROREC' in D1,please":? :? "Have you done so ";:GOSUB YESNO:? :IF QYN THEN GOTO GOBACK
883 GOTO 881
900 QF=7:OPEN #QF,IN,ZERO,"D2:CUSTFILE.NDX":DIM CIX$(1),CIX(CMAX):QA=ADR(CIX$)+ONE:QL=6*(CMAX+ONE)
902 GOSUB BGET:CLOSE #QF:RETURN
910 QF=7:OPEN #QF,IN+OUT,ZERO,"D2:CUSTFILE.NDX":QA=ADR(CIX$)+ONE:QL=6*(CMAX+ONE):GOSUB BPUT:CLOSE #QF:RETURN
920 QF=7:OPEN #QF,IN,ZERO,"D2:JOUREC.NDX":QA=JADR+33:QL=6:GOSUB BGET
922 QT=INT(JDATE(ZERO)/IE7):IF QT=ZERO THEN QT=JMAX
923 DIM JIX$(ONE),JIX(QT+ONE):JIX(ZERO)=JDATE(ZERO)
924 QA=ADR(JIX$)+7:QL=6*QT:GOSUB BGET:CLOSE #QF:RETURN
930 QF=7:OPEN #QF,IN+OUT,ZERO,"D2:JOUREC.NDX":QA=ADR(JIX$)+ONE:QL=6*(JMAX+ONE):GOSUB BPUT:CLOSE #QF:RETURN
940 QF=7:OPEN #QF,IN,ZERO,"D2:RECFIL.NDX":QL=14*(RMAX+ONE):DIM RIX$(QL):QA=ADR(RIX$)
942 RIX$(QL)="?":GOSUB BGET:CLOSE #QF:RETURN
950 QF=7:OPEN #QF,IN+OUT,ZERO,"D2:RECFIL.NDX":QA=ADR(RIX$):QL=14*(RMAX+ONE):GOSUB BPUT:CLOSE #QF:RETURN
1000 REM xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
1001 REM x
1002 REM x REC5 -- POST TRANSACTIONS
1003 REM x         TO MASTER FILE AND
1004 REM x         JOURNALIZE
1005 REM x
1006 REM xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
1020 LET READMRIX=1810:WRITEMRIX=1820
1030 MRIGET=1870:MRIPUT=1880
1040 DIM KEY$(14),TEMP$(40)
1100 REM MENU
1110 GRAPHICS ZERO:? "MICROREC 5 -- POST TRANSACTIONS":? :? :?
1120 ? "Before using this program, you should  make a backup of your data files by"
1130 ? "  using the DUPLICATE DISK option of   ATARI DOS.  DO NOT  use the copy    files option!"
1140 ? :? "Are your files properly backed up?     Please respond ";:GOSUB YESNO
1150 IF QYN=NO THEN GOTO GOBACK
```

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1152 ? :? :? "If you wish, you may make a 'DRY RUN'   of this posting.  That is, all of"
1154 ? "  the checking and totalling of an       actual posting take place, but no"
1155 ? "  files are changed.  This allows you   to check for errors without hurting   valuable data."
1157 ? "DO YOU WANT A 'DRY RUN' ";:GOSUB YESNO:DRYRUN=QYN
1160 GRAPHICS ZERO
1170 IF DRYRUN THEN MRIPUT=9900:RIPUT=MRIPUT:JIPUT=RIPUT:REM ALL THE 'PUTS' BECOME DUMMIES
1172 TRAP 1192:OPEN #2,4,0,JFN$:CLOSE #2:TRAP UNTRAP
1180 ? :? :? :? "     ...please wait..."
1190 GOTO 2000
1192 CLOSE #2:? :? "There is no journal file present":? " no posting to journal file will occur"
1194 ? "  Is this OK ";:GOSUB YESNO:IF QYN=NO THEN GOTO GOBACK
1196 NOPOST=YES:JIPUT=9900:LET READJIX=JIPUT:WRITEJIX=JIPUT:GOTO 1180
1199 STOP
1800 REM ....RECMAST SUBROUTINES..... .
1810 QF=7:OPEN #QF,IN,ZERO,"D2:RECMAST.NDX":QL=14*(MRMAX+ONE):DIM MRIX$(QL):QA=ADR(MRIX$)
1815 MRIX$(QL)="?":GOSUB BGET:CLOSE #QF:RETURN
1820 QF=7:OPEN #QF,IN+OUT,ZERO,"D2:RECMAST.NDX":QA=ADR(MRIX$):QL=14*(MRMAX+ONE):GOSUB BPUT:CLOSE #QF:RETURN
1870 QA=RADR:QL=RLEN:QF=3:QS=ASC(KEY$(12))*256+ASC(KEY$(13)):QT=ASC(KEY$(14)):POINT #QF,QS,QT:GOTO BGET
1880 QA=RADR:QL=RLEN:QF=3:QS=ASC(KEY$(12))*256+ASC(KEY$(13)):QT=ASC(KEY$(14)):POINT #QF,QS,QT:GOTO BPUT
2000 REM     THE REAL WORK BEGINS HERE .
2010 GOSUB READRIX:GOSUB READMRIX:GOSUB READJIX
2020 OPEN #2,IN+OUT,ZERO,RFN$:OPEN #3,IN+OUT,ZERO,RMFN$:IF NOPOST=NO THEN OPEN #4,IN+OUT,ZERO,JFN$
2025 GOSUB 8000:GOSUB 8200
2030 KEY$=RIX$(ONE):GOSUB RIGET:NUMREC=RAMT(ZERO)
2035 IF NUMREC=ZERO THEN ? " POST WHAT?  TRANSACTION FILE EMPTY ":STOP
2040 KEY$=MRIX$(ONE):GOSUB MRIGET:MNUMREC=RAMT(ZERO)
2045 IF NOPOST THEN HIGHDATE=0:GOTO 2100
2050 QI=JIX(ZERO):QA=JADR+6:QL=JLEN:QF=4:GOSUB IGET:REM GET JOURNAL FILE HDR
2060 QDATE=JDATE2(ZERO):GOSUB PDATE:HIGHDATE=QT:REM SAVE FOR COMPARISON
2100 GRAPHICS ZERO:? :? :? "DO YOU WISH ALL ERROR LOGGING":GOSUB PRQUERY
2110 ? :? :?
3000 REM   BEGIN POSTING
3001 ? #PR:? #PR:? #PR;"---BEGINNING POSTING---"
3002 IF DRYRUN THEN ? #PR;"<< DRY RUN ONLY >>"
3005 GOSUB 8200
3010 FOR RECIX=ONE TO NUMREC:QQ=14*RECIX:KEY$=RIX$(QQ+ONE):GOSUB RIGET:PMTFLAG=(ASC(RTERM$)=255)
3020 FOR MRECIX=ZERO TO MNUMREC:QT=14*MRECIX:IF KEY$(ONE,8)=MRIX$(QT+ONE,QT+8) THEN 3500
3030 NEXT MRECIX:REM IF HERE, INV DOES NOT EXIST IN RECMAST
3040 IF PMTFLAG THEN 4800:REM AN OOPSY
3049 REM   ADD A NEW INVOICE
3055 IF MNUMREC=MRMAX THEN PRINT #PR;" ERROR  recmast is full":GOTO 3990
3060 REM POST JOURNAL FILE
3070 FOR POST=ZERO TO 7 STEP 2:QN=RDAT(POST):QT=RDAT(POST+ONE)
3075 IF POST THEN QN=-QN:REM BECUZ ALL EXCEPT 1ST ARE CR ACCTS
3080 TEMP$="invoice ":TEMP$(9)=KEY$(ONE,8)
3095 GOTO 3100+POST
3100 TEMP$(17)=", AR":GOTO 3110
3102 TEMP$(17)=", SALES":GOTO 3110
3104 TEMP$(17)=", TAX":GOTO 3110
3106 TEMP$(17)=", SHIPPING":GOTO 3110
3110 TEMP$(LEN(TEMP$)+ONE)=BLANK$
3180 GOSUB 9000:REM POST IT!
3195 NEXT POST
3310 FOR QI=ZERO TO 7:RDAT(QI)=ZERO:NEXT QI
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```
3315 IF DRYRUN=NO THEN MNUMREC=MNUMREC+ONE
3320 QQ=14*MNUMREC:KEY$(12,14)=MRIX$(QQ+12,QQ+14):MRIX$(QQ+ONE,QQ+14)=KEY$
3330 GOSUB MRIPUT
3390 ? #PR;"added invoice ";KEY$(ONE,8);" to master"
3490 GOTO 3990
3500 REM   INVOICE EXISTS
3510 IF PMTFLAG=NO THEN 4900:REM DUPLICATE INVOICE
3515 IF KEY$(9,11)<>MRIX$(QT+9,QT+11) THEN 4700:REM CUSTNUM MISMATCH
3530 REM POST IT!
3570 FOR POST=ZERO TO 3 STEP 2:QN=RDAT(POST):QT=RDAT(POST+ONE)
3575 IF POST THEN QN=-QN:REM BECUZ ALL EXCEPT 1ST ARE CR ACCTS
3580 TEMP$="invoice ":TEMP$(9)=KEY$(ONE,8)
3595 GOTO 3600+POST
3600 TEMP$(17)=", PMT":GOTO 3610
3602 TEMP$(17)=", AR"
3610 TEMP$(LEN(TEMP$)+ONE)=BLANK$
3680 GOSUB 9000:REM POST IT!
3695 NEXT POST
3700 RPMT=RDAT(ZERO):RDATE=RDATE(ZERO)
3710 QQ=14*MRECIX:KEY$=MRIX$(QQ+ONE):GOSUB MRIGET
3720 FOR QT=ZERO TO 7 STEP 2:IF RDAT(QT)=ZERO THEN 3750
3730 NEXT QT
3740 PRINT #PR;" ERROR  fifth pmt, invoice ";RINV$:GOTO 3990
3750 REM PUT PMT IN PLACE
3760 RDAT(QT)=RPMT:RDAT(QT+ONE)=RDATE
3780 GOSUB MRIPUT:REM PRESUMES JOU STUFF DOESN'T TOUCH KEY$ !!
3790 ? #PR;"applied payment to invoice ";KEY$(ONE,8)
3990 NEXT RECIX
4000 REM    DONE WITH POSTING
4010 CLOSE #2:REM RECFIL IS READ ONLY
4020 KEY$=MRIX$(ONE):GOSUB MRIGET:RAMT(ZERO)=MNUMREC:GOSUB MRIPUT
4025 CLOSE #3
4030 IF DRYRUN=NO THEN GOSUB WRITEMRIX
4033 IF NOPOST THEN 4095
4035 QI=JIX(ZERO):QA=JADR+6:QL=JLEN:QF=4:HIGHDATE=JDATE2(ZERO):GOSUB IGET
4040 JDATE2(ZERO)=HIGHDATE:JAMT(ZERO)=NUMJOU:QI=JIX(ZERO):GOSUB IPUT
4045 IF DRYRUN=NO THEN GOSUB WRITEJIX
4050 CLOSE #4
4095 PRINT #PR;"----POSTING COMPLETE----"
4200 ? :? :? :?
4210 ? "----POSTING COMPLETE----"
4220 IF DRYRUN=NO THEN GOTO GOBACK
4230 ? :? :? " DRY RUN COMPLETE ":? "POST AGAIN ";:GOSUB YESNO:IF QYN THEN RUN
4500 GOTO GOBACK
4700 REM
4710 PRINT #PR;" ERROR  customer number mismatch:"
4720 PRINT #PR;"  invoice ";KEY$(ONE,8);" : cust ";KEY$(9,11);" ? ";MRIX$(QT+9,QT+11)
4800 REM PMT, NO INVOICE
4810 PRINT #PR;" ERROR  no invoice # ";KEY$(ONE,8);"for pmt"
4845 GOTO 3990
4900 REM DUP INVIOCE
4910 PRINT #PR;" ERROR  duplicate invoice # ";KEY$(ONE,8)
4945 GOTO 3990
8000 REM CLR JOUFIL
```

```
8010 JACCT$=BLANK$:JDESC$=BLANK$:JAMT(ZERO)=ZERO:JDATE(ZERO)=ZERO
8090 RETURN
8200 REM CLR RECFIL AND RECMAST DATA AREA
8210 RCNUM$=BLANK$:RINV$=BLANK$:RPO$=BLANK$:RDESC$=BLANK$:RTERM$=BLANK$
8220 RDATE(ZERO)=ZERO:RAMT(ZERO)=ZERO:FOR QT=ZERO TO 8:RDAT(QT)=ZERO:NEXT QT
8290 RETURN
9000 REM POST AN ENTRY TO JOURNAL FILE
9005 IF NOPOST THEN RETURN :REM IF NO JOURNAL FILE
9010 REM ENTER WITH QT=CHA ACCT #, TEMP$ AS DESCRIPTION, QN AS AMT, RDATE(0) AS DATE
9015 IF QT=ZERO THEN RETURN :REM DON'T POST IF ACCT # IS 0
9020 IF QT<ZERO THEN QN=-QN:QT=-QT
9030 IF QT<100 OR QT>998 OR QT<>INT(QT) THEN ? #PR;" ERROR:  BAD CHART OF ACCTS ACCT #":RETURN
9120 IF QT>=300 AND QT<=799 THEN QN=-QN
9130 NUMJOU=NUMJOU+ONE:JDESC$=TEMP$:JDATE(ZERO)=RDATE(ZERO):JAMT(ZERO)=QN
9140 TEMP$=STR$(1000+QT):JACCT$=TEMP$(2,4)
9150 QI=JIX(NUMJOU):QI=QI-IE7*INT(QI/IE7):QI=QI+IE7*QT:JIX(NUMJOU)=QI
9160 QDATE=RDATE(ZERO):GOSUB PDATE:IF QT>HIGHDATE THEN JDATE2(ZERO)=RDATE(ZERO):REM HIGHER MAX
9180 GOSUB JIPUT
9190 RETURN
9900 RETURN :REM DUMMY ROUTINE FOR DRY RUN
```

```
10 REM -- MICROREC --
20 REM ACCOUNTS RECEIVABLE PROGRAM       FROM COMPUMAX ASSOCIATES, INC.
30 REM 467 HAMILTON AVE.
40 REM PALO ALTO, CA 94301
50 REM COPYRIGHT (C) 1980, COMPUMAX
60 REM
70 REM UNDER PROTECTION OF CALIFORNIA TRADE SECRET LAW.  DO NOT COPY, RENAME, CHANGE, CONVERT, OR EXPAND
80 REM FOR RESALE WITHOUT WRITTEN AGREEMENT WITH COMPUMAX.
90 REM ----------------------------
100 REM RCOMMON -- CODE COMMON TO ALL      MICROREC MODULES
105 REM
110 REM SUBROUTINE ADDRESSES
120 IGET=505:BGET=510:IPUT=515:BPUT=520
125 JIGET=530:JIPUT=540:CIGET=550:CIPUT=560:RIGET=570:RIPUT=580
150 PDATE=800:PRETTY=825:PRQUERY=860:YESNO=850:GOBACK=875
160 LET READCIX=900:WRITECIX=910:LET READJIX=920:WRITEJIX=930:LET READRIX=940:WRITERIX=950
200 REM DIMENSION, ETC.
210 DIM QD$(9),FMT$(40),F2$(15),BLANK$(40):BLANK$=" ":BLANK$(40)=" ":BLANK$(2,39)=BLANK$
220 DIM MONTH$(40):MONTH$="??JANFEBMARAPRMAYJUNJULAUGSEPOCTNOVDEC"
290 C100=100:IE7=10000000:ZERO=0:LET ONE=1:UNTRAP=40000:YES=ONE:NO=ZERO
292 PR=5:IN=4:OUT=8
350 REM FILE NAMES, DATA FILES ONLY
351 REM NAMES OF INDEX FILES ARE
352 REM IN LINES 900-999
360 DIM CUFN$(15):CUFN$="D2:CUSTFILE.DAT"
370 DIM JFN$(15):JFN$="D2:JOUREC.DAT"
380 DIM RFN$(15):RFN$="D2:RECFIL.DAT"
390 DIM RMFN$(15):RMFN$="D2:RECMAST.DAT"
400 REM ===== RECORD LAYOUTS ========= .
409 REM .......JOURNAL FILE ............ .
410 DIM JACCT$(3),JDESC$(30),JDATE(ZERO),JAMT(ZERO),JDATE2(ZERO):JLEN=45
415 JMAX=200:JADR=ADR(JACCT$)
419 REM .....CUSTOMER FILE ............ .
420 DIM CNUM$(3),CNAME$(25),CADDR1$(25),CADDR2$(15),CCITY$(15),CSTATE$(2),CREM$(16),CDAT(4):CULEN=125
425 CMAX=200:CADR=ADR(CNUM$)
429 REM .....RECFILE AND RECMAST..... .
430 DIM RCNUM$(3),RINV$(8),RPO$(8),RDATE(ZERO),RDESC$(20),RTERM$(20),RAMT(ZERO),RDAT(9):RLEN=125
435 RMAX=50:LET RADR=ADR(RCNUM$):REM FOR RECFIL
440 MRMAX=300:REM FOR RECMAST
480 IF PEEK(1664)<>160 THEN GOTO GOBACK
499 OPEN #ONE,4,ZERO,"K:":GOTO 1000
500 REM ... GET AND PUT ROUTINES ..... .
505 QI=QI-IE7*INT(QI/IE7):QT=INT(QI/1000):QI=QI-1000*QT:POINT #QF,QT,QI
510 QT=USR(1664,QF,QA,QL):IF QT=ONE OR QT=3 THEN RETURN
511 PRINT " BAD BGET...STATUS ";QT:STOP
515 QI=QI-IE7*INT(QI/IE7):QT=INT(QI/1000):QI=QI-1000*QT:POINT #QF,QT,QI
520 QT=USR(1668,QF,QA,QL):IF QT=ONE OR QT=3 THEN RETURN
521 PRINT " BAD BPUT...STATUS ";QT:STOP
530 QA=JADR:QL=JLEN:QF=4:GOTO IGET
540 QA=JADR:QL=JLEN:QF=4:GOTO IPUT
550 QA=CADR:QL=CULEN:QF=3:GOTO IGET
560 QA=CADR:QL=CULEN:QF=3:GOTO IPUT
570 QA=RADR:QL=RLEN:QF=2:QS=ASC(KEY$(12))*256+ASC(KEY$(13)):QT=ASC(KEY$(14)):POINT #QF,QS,QT:GOTO BGET
580 QA=RADR:QL=RLEN:QF=2:QS=ASC(KEY$(12))*256+ASC(KEY$(13)):QT=ASC(KEY$(14)):POINT #QF,QS,QT:GOTO BPUT
```

```
799 REM .....MISCELLANEOUS ROUTINES... .
800 REM Print DATE
805 QM=INT(QDATE/10000):QT=QDATE-QM*10000:QD=INT(QT/C100):QY=QT-QD*C100:IF QM<1 OR QM>12 THEN QD$="???":GOTO 810
807 QT=10000*QY+100*QM+QD:QD$=MONTH$(QM*3,QM*3+2)
810 QD$(4)=STR$(QD+C100):QD$(4,4)=" "
820 QD$(7)=STR$(C100+QY):QD$(7,7)=",":RETURN
825 REM PRETTY formatted print
827 IF ABS(QN)>=1000000000 THEN FMT$=STR$(QN):RETURN
829 QT=INT(ABS(QN)*C100+0.5):F2$=" $":IF QN<0 THEN F2$="($"
831 F2$(3)=STR$(INT(QT/C100)):F2$(LEN(F2$)+ONE)=",":QT=QT-C100*INT(QT/C100)
833 FMT$=STR$(C100+QT):F2$(LEN(F2$)+ONE)=FMT$(2,3):FMT$=BLANK$:FMT$(15-LEN(F2$))=F2$
835 IF QN<ZERO THEN FMT$(15)=")"
837 RETURN
850 REM YESNO
853 ? "(Y OR N)? ";
855 GET #ONE,QYN:IF QYN=89 OR QYN=121 THEN ? "Y";:QYN=YES:RETURN
857 IF QYN=78 OR QYN=110 THEN ? "N";:QYN=NO:RETURN
859 ? CHR$(253);:GOTO 855
860 REM ASK FOR AND OPEN PRINT FILE
861 CLOSE #PR
862 PRFLAG=NO:FMT$="E:":? :? "OUTPUT TO GO TO PRINTER ";:GOSUB YESNO:? :IF QYN THEN FMT$="P:":PRFLAG=YES
864 OPEN #PR,8,ZERO,FMT$:RETURN
875 REM BACK TO MAMA
877 GRAPHICS 2:PRINT #6:PRINT #6:PRINT #6;"     MICROREC":PRINT #6:PRINT #6:PRINT #6;"        by"
879 PRINT #6;"  C O M P U M A X":? :? :? :? "    ...please wait...":TRAP 881:RUN "D1:MICROREC"
881 ? :? "Put disk with 'MICROREC' in D1,please":? :? "Have you done so ";:GOSUB YESNO:? :IF QYN THEN GOTO GOBACK
883 GOTO 881
900 QF=7:OPEN #QF,IN,ZERO,"D2:CUSTFILE.NDX":DIM CIX$(1),CIX(CMAX):QA=ADR(CIX$)+ONE:QL=6*(CMAX+ONE)
902 GOSUB BGET:CLOSE #QF:RETURN
910 QF=7:OPEN #QF,IN+OUT,ZERO,"D2:CUSTFILE.NDX":QA=ADR(CIX$)+ONE:QL=6*(CMAX+ONE):GOSUB BPUT:CLOSE #QF:RETURN
920 QF=7:OPEN #QF,IN,ZERO,"D2:JOUREC.NDX":QA=JADR+33:QL=6:GOSUB BGET
922 QT=INT(JDATE(ZERO)/1E7):IF QT=ZERO THEN QT=JMAX
923 DIM JIX$(ONE),JIX(QT):JIX(ZERO)=JDATE(ZERO)
924 QA=ADR(JIX$)+7:QL=6*QT:GOSUB BGET:CLOSE #QF:RETURN
930 QF=7:OPEN #QF,IN+OUT,ZERO,"D2:JOUREC.NDX":QA=ADR(JIX$)+ONE:QL=6*(JMAX+ONE):GOSUB BPUT:CLOSE #QF:RETURN
940 QF=7:OPEN #QF,IN,ZERO,"D2:RECFIL.NDX":QL=14*(RMAX+ONE):DIM RIX$(QL):QA=ADR(RIX$)
942 RIX$(QL)="?":GOSUB BGET:CLOSE #QF:RETURN
950 QF=7:OPEN #QF,IN+OUT,ZERO,"D2:RECFIL.NDX":QA=ADR(RIX$):QL=14*(RMAX+ONE):GOSUB BPUT:CLOSE #QF:RETURN
1000 REM xxxxxxxxxxxxxxxxxxxxxxxxxxxxx
1001 REM x
1002 REM x REC6 -- INITIALIZE FILES
1004 REM x
1005 REM xxxxxxxxxxxxxxxxxxxxxxxxxxxxx
1100 REM MENU
1110 GRAPHICS ZERO:? "MICROREC 6 -- (RE)INITIALIZE FILES":? :?
1120 ? "61 - CUSTOMER FILE"
1130 ? "62 - RECEIVABLES TRANSACTION FILE"
1140 ? "63 - RECEIVABLES MASTER FILE"
1150 ? "64 - LEDGER JOURNAL FILE FOR"
1152 ? "       RECEIVABLES TRANSACTIONS"
1160 ? "65 - PURGE OBSOLETE DATA FROM MASTER        FILE"
1190 ? :? " 0 - EXIT"
1200 REM VECTOR
1205 TRAP 1000
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1210 ? :? :? "[ Options 61 thru 64 initialize the":? "    file shown. ]":?
1215 ? "  SELECT ";:INPUT OPT
1220 IF OPT=ZERO THEN GOTO GOBACK
1230 IF OPT<61 OR OPT>65 OR OPT<>INT(OPT) THEN ? "}}":GOTO 1000
1290 ON OPT-60 GOTO 2000,3000,4000,5000,7000
2000 REM INIT CUSTFILE
2001 TRAP UNTRAP
2010 GOSUB 8100
2015 ? :? :POSITION 12,22:? "WRITING RECORD # ";
2020 DIM CIX$(1),CIX(CMAX):REM NEEDED BECUZ WE DON'T DO READCIX
2025 GOSUB 8000:REM CLR DATA
2030 QF=5:OPEN #QF,8,ZERO,CUFN$
2035 QA=CADR:QL=CULEN
2040 FOR QI=0 TO CMAX:NOTE #QF,QS,QT:CIX(QI)=QS*1000+QT:GOSUB BPUT
2045 POSITION 30,22:? QI;:NEXT QI
2050 CLOSE #QF
2055 IN=ZERO:REM TO INSURE THAT INDEX FILE IS CREATED!
2060 GOSUB WRITECIX
2090 RUN
3000 REM INIT RECFILE
3005 TRAP 3000
3010 GRAPHICS ZERO:? " NOTE:  be sure you have posted the          previous Receivables trans-"
3020 ? "        action file to the Master file":? "Have you done so ";:GOSUB YESNO:IF QYN=NO THEN RUN
3050 ? :? :? "Please enter the date of the start      of the period that this transaction   file will cover."
3060 ? "Date (MMDDYY) ";:INPUT QDATE:GOSUB PDATE
3070 ? "              ";QD$
3080 ? :? "DATE OKAY ";:GOSUB YESNO:IF QYN=NO THEN 3000
3090 ? :? :POSITION 12,22:? "WRITING RECORD # ";
3100 TRAP UNTRAP
3110 QQ=14*(RMAX+ONE):DIM RIX$(QQ):REM BECUZ WE DON'T CALL READRIX
3115 RIX$(QQ)=" ":RIX$(ONE,ONE)=" ":RIX$(2,QQ)=RIX$(ONE)
3120 QA=RADR:QL=RLEN:QF=2:OPEN #QF,OUT,ZERO,RFN$
3130 GOSUB 8200
3140 RDATE(ZERO)=QDATE:REM FIRST RECORD IS HEADER
3200 FOR QQ=ZERO TO RMAX:NOTE #QF,QS,QT:QI=QQ*14:RIX$(QI+14,QI+14)=CHR$(QT)
3210 QT=INT(QS/256):RIX$(QI+12,QI+12)=CHR$(QT):RIX$(QI+13,QI+13)=CHR$(QS-256*QT)
3215 POSITION 30,22:? QQ;
3220 GOSUB BPUT:NEXT QQ
3225 IN=ZERO:REM TO INSURE THAT INDEX FILE IS CREATED!
3230 CLOSE #QF:GOSUB WRITERIX
3990 RUN
3999 STOP
4000 REM INIT RECMAST
4001 TRAP UNTRAP
4010 LET READRIX=4940:WRITERIX=4950
4020 RMAX=MRMAX
4050 GOSUB 8100
4060 ? :? :POSITION 12,22:? "WRITING RECORD # ";
4100 TRAP UNTRAP
4110 QQ=14*(RMAX+ONE):DIM RIX$(QQ):REM BECUZ WE DON'T CALL READRIX
4115 RIX$(QQ)=" ":RIX$(ONE,ONE)=" ":RIX$(2,QQ)=RIX$(ONE)
4120 QA=RADR:QL=RLEN:QF=2:OPEN #QF,OUT,ZERO,RMFN$
4130 GOSUB 8200
4140 RIX$(1,11)="*HEADER*000":REM HDR IS CUST # ZERO
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4200 FOR QQ=ZERO TO RMAX:NOTE #QF,QS,QT:QI=QQ*14:RIX$(QI+14,QI+14)=CHR$(QT)
4210 QT=INT(QS/256):RIX$(QI+12,QI+12)=CHR$(QT):RIX$(QI+13,QI+13)=CHR$(QS-256*QT)
4215 POSITION 30,22:PRINT QQ;
4220 GOSUB BPUT:NEXT QQ
4230 CLOSE #QF:GOSUB WRITERIX
4290 RUN
4940 QF=7:OPEN #QF,IN,ZERO,"D2:RECMAST.NDX":QL=14*(RMAX+ONE):DIM RIX$(QL):QA=ADR(RIX$)
4942 RIX$(QL)="?":GOSUB BGET:CLOSE #QF:RETURN
4950 QF=7:OPEN #QF,OUT,ZERO,"D2:RECMAST.NDX":QA=ADR(RIX$):QL=14*(RMAX+ONE)+ONE:GOSUB BPUT:CLOSE #QF:RETURN
4999 STOP
5000 REM INIT JOUFIL
5005 TRAP 5000
5010 GRAPHICS ZERO:? " NOTE:  be sure you have posted the          previous journal file to the"
5020 ? "        chart of accounts file using          MICROLEDGER before doing this"
5030 ? "  Have you done so ";:GOSUB YESNO:IF QYN=NO THEN RUN
5050 ? :? :? "Please enter the date of the start      of the period that this journal       file will cover."
5060 ? "Date (MMDDYY) ";:INPUT QDATE:GOSUB PDATE
5070 ? "              ";QD$
5080 ? :? "DATE OKAY ";:GOSUB YESNO:IF QYN=NO THEN 5000
5100 TRAP UNTRAP
5110 DIM JIX$(ONE),JIX(JMAX):REM MUST DIM BECUZ WE DON'T DO READJIX
5120 QF=3:OPEN #QF,8,ZERO,JFN$
5130 JACCT$=BLANK$:JAMT(ZERO)=ZERO:JDATE2(ZERO)=QDATE
5140 JDATE(ZERO)=QDATE:JDESC$="???JOURNAL FROM MICROREC                "
5150 NOTE #QF,QS,QT:QI=JMAX*IE7+QS*1000+QT:JIX(ZERO)=QI
5160 QA=JADR+6:QL=JLEN:GOSUB BPUT
5170 JDATE(ZERO)=ZERO:JDATE2(ZERO)=ZERO:JDESC$=BLANK$
5180 QA=JADR:REM ONLY RECORD ZERO IS FUNNY
5200 ? :? :? "...please wait..."
5210 FOR QQ=ONE TO JMAX:NOTE #QF,QS,QT:JIX(QQ)=QS*1000+QT:GOSUB BPUT:NEXT QQ
5215 IN=ZERO:REM TO INSURE THAT INDEX FILE IS CREATED!
5220 CLOSE #QF:GOSUB WRITEJIX
5990 RUN
7000 REM ... PURGE OBSOLETE DATA ...   .
7001 TRAP UNTRAP
7010 LET READRIX=4940:WRITERIX=4950
7020 RMAX=MRMAX
7030 GRAPHICS ZERO:? "PURGE OBSOLETE DATA FROM MASTER FILE":? :? :? "This routine will purge all invoices"
7032 ? "  which balance (i.e., which have been  fully paid) IF the date of the"
7034 ? "  Invoice is on or prior to a date":? "  which you select."
7040 ? :? :? "Is this what you want ";:GOSUB YESNO:IF QYN=NO THEN RUN
7045 TRAP 7050
7050 ? :? :? "PURGE INVOICES PRIOR TO WHAT DATE":? "   (MMDDYY) ";:INPUT QDATE
7055 GOSUB PDATE:? "            ";QD$
7060 ? :? "DATE OKAY ";:GOSUB YESNO:IF QYN=NO THEN RUN
7070 PURGEDATE=QT
7080 TRAP UNTRAP
7082 ? :? :? "AUDIT TRAIL,":GOSUB PRQUERY
7090 ? :? :? "...please wait..."
7095 GOSUB READRIX
7100 REM READY TO TRY IT
7120 QF=2:OPEN #QF,IN+OUT,ZERO,RMFN$
7130 GOSUB 8200
7140 DIM KEY$(14)
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7150 KEY$=RIX$(1):GOSUB RIGET
7160 NUMREC=RAMT(ZERO):IF NUMREC=ZERO THEN ? " MASTER FILE IS EMPTY ":STOP
7200 FOR RECIX=ONE TO NUMREC:RP=RECIX*14:KEY$=RIX$(RP+ONE):GOSUB RIGET
7210 QDATE=RDATE(ZERO):GOSUB PDATE:IF QT>PURGEDATE THEN 7390
7220 QN=RAMT(ZERO):FOR QT=ZERO TO 7 STEP 2:QN=QN-RDAT(QT):NEXT QT
7230 IF QN<>ZERO THEN 7390:REM PAYMENTS DON'T BALANCE INVOICED AMT
7240 PRINT #PR;"PURGING INVOICE ";RINV$;", ";QD$
7250 RIX$(RP+ONE)=CHR$(255):REM FLAG FOR LATER
7390 NEXT RECIX:REM THROUGH THE FILE
7400 REM PURGED RECORDS...MOVE INDEX AROUND
7410 ? :? :? "...PLEASE WAIT...":? :?
7420 FOR RECIX=NUMREC TO ONE STEP -ONE:RP=RECIX*14:IF RIX$(RP+ONE)<>CHR$(255) THEN 7590:REM UNPURGED RECORD
7430 KEY$="        000":KEY$(12,14)=RIX$(RP+12):REM TJ TACK AT END OF FILE
7440 IF RECIX=MRMAX THEN 7460
7450 RIX$(RP+ONE,14*MRMAX+ONE)=RIX$(RP+15)
7460 RIX$(14*MRMAX+ONE)=KEY$
7590 NEXT RECIX:REM SQUEEZE EM UP
7610 QF=7:OPEN #QF,OUT,ZERO,"D2:RECMAST.NDX":QA=ADR(RIX$):QL=14*(RMAX+ONE)+ONE:GOSUB BPUT:CLOSE #QF
7620 CLOSE #2
7630 ? :? :? " MASTER FILE PURGED ":FOR QT=ONE TO 1000:NEXT QT
7690 RUN
8000 REM CLR CUSTFILE DATA FIELDS
8010 C  NUM$="000":CNAME$=BLANK$:CADDR1$=BLANK$:CADDR2$=BLANK$
8020 CCITY$=BLANK$:CSTATE$=BLANK$:CREM$=BLANK$
8030 CDAT(ZERO)=ZERO:C DAT(ONE)=ZERO:CDAT(2)=ZERO:CDAT(:       :)=ZERO
8090 RETURN
8100 REM
8110 ? :? :? " CAUTION:  this file is normally only           initialized when starting"
8120 ? "          a new receivables system!":? :? "Are you sure about this ";:GOSUB YESNO
8130 IF QYN THEN RETURN
8140 RUN
8200 REM CLR RECFILE DATA FIELDS
8210 RCNUM$=BLANK$:RINV$=BLANK$:RPO$=BLANK$:RDESC$=BLANK$:RTERM$=BLANK$
8220 RDATE(ZERO)=ZERO:RAMT(ZERO)=ZERO:FOR QT=0 TO 9:RDAT(QT)=ZERO:NEXT QT
8290 RETURN
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